◆ ROADSIDE VEGETATION ◆
BIBLIOGRAPHY

Second Edition

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First edition compiled by
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Roadside Conservation Committee
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Department of
Conservation and Land Management

FOREWORD

In many areas of Western Australia, the remnant vegetation left along the road reserve is the last remaining example of the flora which used to exist in the area prior to agricultural clearing. Many rare and geographically restricted plants - once, perhaps, more widespread - are now confined solely or principally to road verges. In addition, roadsides provide a habitat for animals and are especially important as corridors linking patches of remnant vegetation.

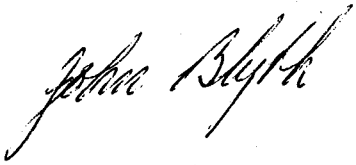
Yet road reserves, being long narrow strips, are notoriously difficult to manage. They are frequently subject to disturbance, both from road making and also from the activities of other authorities that use the road corridor. In addition, fertilisers, herbicides, weeds and sometimes soil, drift onto the verge from the adjoining paddocks.

The Roadside Conservation Committee (RCC) is convened by the Department of Conservation and Land Management and funded jointly by that Department and the Main Roads Department. Its aims are to co-ordinate and promote the conservation and effective management of rail and roadside vegetation for the benefit of the environment and the people of Western Australia.

Much research information relevant to the management of roadsides is scattered and not easily available to the road manager. The Roadside Vegetation Bibliography, first published in 1987, is intended to make this information readily available to potential users.

Continued interest in the Bibliography, and much new research, has led to the production of this updated Second Edition. It is funded by the RCC with a substantial contribution from the Victorian Roadsides Conservation Committee, for which we are most grateful.

The information in this bibliography is listed under keywords, and should be of great value not only to those concerned with roadside vegetation, but also to anyone who is faced with the problem of managing an isolated area of native vegetation.



John Blyth
CHAIRMAN
ROADSIDE CONSERVATION COMMITTEE

PREFACE

This bibliography was prepared for the Roadside Conservation Committee with the aim of providing material from Australia and overseas relevant to the conservation and management of Australia's roadside and railside vegetation. It contains annotated references, and it is intended that it will be updated regularly to form an up-to-date source of information available to planners, managers and researchers.

All entries are arranged in the following order:

RECORD NUMBER:CATEGORY - WA for Western Australia
AU for Other Australian States
OS for Overseas

AUTHOR
DATE
TITLE
REFERENCE

LOCATION OF WORK
TYPE OF REPORT - management, scientific or general interest.

SUMMARY

KEYWORDS

Records are arranged alphabetically by author. Keywords are indexed by record number.

This work was supported by the Roadside Conservation Committee. Use of facilities and assistance from the Main Roads Department and the Department of Conservation and Land Management, Como were used in this updated version of the bibliography compiled by Valerie Hobbs in March, 1987. Special thanks to Peter Walsh.

Vicki Paton
February 1989

KEYWORDS LIST

ASSESSMENT
BEES
BIBLIOGRAPHY
BIOLOGICAL CONTROL
BIRDS
CLEARING
CONSERVATION
CONSTRUCTION
CORRIDOR
DISEASE
FAUNA
FERTILISER
FIRE
GENETICS
GERMINATION
GRAZING
HEDGEROW
HERBICIDE
HISTORY
INVERTEBRATE
ISLAND BIOGEOGRAPHY
LANDSCAPE
LEAD
LEGISLATION
MOWING
NATIVE FLORA
PEST CONTROL
PLANNING
PLANTING
PLOUGHING
POLLUTION
RABBIT
RAILWAY
REHABILITATION
ROAD SAFETY
ROAD-KILL
SALINITY
SEEDING
SHEEP
SHELTERBELT
SMALL MAMMAL
SOIL EROSION
SUCCESSION
VEHICLE EXHAUST
WEED
WEED CONTROL
WETLANDS

KEYWORDS INDEX

OS:1

AASHO (AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS)
1970
A guide for highway landscape and environmental design
American Association of State Highway Officials, Washington

USA
management

Landscape design principles should be considered at all stages of the design process, and should integrate the highway with its environment.

construction, landscape

OS:2

AASHO (AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS)
1958
Policy on maintenance of shoulders, road approaches and sidewalks
American Association of State Highway Officials, Washington. 65 pp.

USA
management

Addresses the whole range of issues involved in maintaining roadsides. Little emphasis on preserving native vegetation.

fertiliser, mowing, planting, soil erosion, weed control

OS:3

AASHTO (AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS)
1970
A guide for highway landscape and experimental design
Prepared by Operating Committee on Roadside Development and adopted by AASHTO. 84 pp.

USA
management

Guide to developing quality, character and consistency in highways in conformity with accepted landscape architectural principles. Essential to consider highway part of total environment, and communication between all organisations.

landscape

OS:4

ADAMS LW
1984
Small mammal use of an interstate highway median strip
Journal of Applied Ecology 21, 175-178

USA
scientific

Seven species found. Compares use of median strip habitat with road verge habitat and habitat beyond that. Density highest in unmowed habitat bordered by woods towards median strip interior.

fauna, mowing, small mammal

OS:5

ADAMS LW & GEIS AD
1983
Effects of roads on small mammals
Journal of Applied Ecology 20, 403-416

USA
scientific

Altogether 40 species found. Grassland species preferred roadside habitat to adjacent habitat, as did many less habitat-specific species. Road-kills apparently not detrimental to populations.

fauna, road-kill, small mammal

OS:6

ADAMS LW & GEIS AD
1981
Effects of highways on wildlife
Report No. FHWA-RD-81-067, Federal Highway Administration, US Department of Transportation, Washington DC. 142 pp.

USA
management, scientific

not seen

fauna

OS:7

ADAMS LW & GEIS AD (EDS)
1978
Effects of highways on wildlife populations and habitats: selection and evaluation of procedures
Report NO. FHWA-RD-78-92, Federal Highway Administration, US Department of Transportation, Washington DC. 170 pp.

USA
management, scientific

not seen

fauna

AU:8

ADAMS M
1984
Local Native Flora - a letter and some useful information on propagation and direct seeding
In: At Ground Level - a workshop on restoring local vegetation. Roadside Conservation Committee/Department of Conservation, Forests and Lands. La Trobe University, Victoria

Victoria
general

Lists seed collection period, germination pre-treatment, germination rate and suitability for direct seeding for approx 70 species indigenous to the Greater Melbourne area.

germination, native flora, seeding

OS:9

ADAMS MC
1977
Roadside management in North Carolina
Transportation Research Record 647, 20-23

USA
management

Review paper covering several aspects of roadside maintenance including design, mowing, erosion control, litter and rest areas.

mowing, soil erosion

AU:10

ADAMSON EVC
1977
Recognition of roadside values
Victoria's Resources 19(2), 11-13

Victoria
general

General discussion of roadside "resources" and their potential for use and conservation.

conservation

AU:11

ADAMSON EVC
1980
Roadside values
In: Roadsides of today and tomorrow. Proceedings of a conference held in Melbourne, Victoria. Roadsides Conservation Committee.

Victoria
management

Overview of the development of environmental attitudes towards roadsides and the formation of the RCC.

conservation, legislation

AU:12

ADAMSON EVC
1976
Conservation of...what? (roadsides)
Paper presented at the 32nd Conference of Municipal Engineers. Country Roads Board, Melbourne, Victoria

Victoria
management

not seen

conservation

OS:13

ALBASEL N & COTTENIE A
1985
Heavy metal contamination near major highways, industrial and urban areas in Belgian grassland
Water Air Soil Pollution 24(1), 103-110

Belgium
scientific

Contamination of soils by zinc, lead and in some cases, manganese, decreased with distance from highway. High accumulation of metals, especially lead, was also observed in roadside plants.

lead, pollution

OS:14

ALLEN RE & MCCULLOUGH DR
1976
Deer-car accidents in southern Michigan
Journal of Wildlife Management 40, 317-325

USA
scientific

Most accidents at dawn, dusk or after dark, and most when traffic greatest, at weekends. Most in fall and early winter during rut, when mainly males killed; rest of year mainly females killed.

fauna, road-kill

OS:15

ALLEN TJ & MCCULLY WG
1976
Establishment and management of roadside vegetation
Texas Transportation Institute. Report 182-2F. 136 pp.

USA
management, scientific

Compares the effectiveness of various mulches, herbicides and grass planting regimes.

herbicide, soil erosion

OS:16

ALVERSON K
1976
Native grasses and wildflowers - low maintenance plants
Soil Conservation 41(6), 18-20

USA
management

Anecdotal account of efforts to plant natives for erosion control along American roads and highways. Notes the contributions of the Soil Conservation Service and Extension Service as well as other organisations.

conservation, landscape, planting, soil erosion

OS:17

AMARANTHUS MP, RICE RM, BARR NR & ZIEMER RR
1985
Logging and forest roads related to increased debris slides in southwestern Oregon
J. For. 83(4), 229-233

USA
management, scientific

Over a 20 year period, erosion rates on roads and landings were found to be 100 times those on indisturbed areas, while erosion on harvested areas was 7 times that of undisturbed areas.

planning, soil erosion

OS:18

AMERICAN HORTICULTURAL SOCIETY
1973
Transit planting: a manual
Mt Vernon, Virginia. 65 pp.

USA
management

A guide to planners in selecting specific plants for specific environments, taking into account such factors as climate, the plant's ability to resist pollution and the amount of care required in maintenance.

landscape, planting

AU:19

AMOR RL & PIGGIN CM
1977
Factors influencing the establishment and success of exotic plants in Australia
In: Anderson D (Ed.) Exotic species in Australia- their establishment and success. Proceedings of the Ecological Society of Australia 10, 15-26

Australia
scientific

Discusses nature of disturbances and exotics which invade afterwards. Includes discussion of roadsides as disturbances which facilitate invasion and as avenues which exotics can spread along.

corridor, weed

AU:20

AMOR RL & STEVENS PL
1976
Spread of weeds from a roadside into sclerophyll forests at Dartmouth, Australia
Weed Research 16, 111-115

Victoria
scientific

Spread of Rubus procerus and Hypochaeris radicata from old roadside declined with distance from road, correlated with reduced light. Wetter forest communities were more heavily colonised by weeds than drier.

weed, weed control

OS:21

ANDERSON BA & SIMONS DB
1983
Soil erosion study of exposed highway construction slopes and roadways
In: Wetlands, floodplains, erosion, and storm water pumping, Transportation Research Record 948, 40-47

USA
management

The quantities of sediment produced from construction slopes and roadways are determined, and a methodology to assist in the determination of these quantities is presented.

soil erosion

OS:22

ANDERSON CR
1973
Preservation of landscape features
In: Environmental considerations in planning, design and construction. Highway Research Board,Division of Engineering National Academy of Sciences-National Academy of Engineering Washington. Special Report 138.

USA
management

Landscape features should be incorporated into highway design from early stages of planning.

landscape, planning

AU:23

ANDERSON RC
1979
The value of roadside verges to wildlife
Victoria's Resources 19(2), 15-16

Victoria
general

General discussion of the value of road verges to wildlife and also detrimental effects of roads such as road-kills and pollution.

corridor, fauna, pollution, road-kill

WA:24

ANON
1984
Environmental review of National Highway
Western Roads 9(11), 7-11

Western Australia
management

Describes environmental assessment of the proposed Newman-White Springs section of the Perth-Darwin National Highway. Article is summary of draft environmental review / impact statement from Main Roads Dept advance planning division.

assessment, planning

WA:25

ANON
1975
Roadside verges
Ongerup Conservation Organisation, WA. 4 pp.

Western Australia
general, management

not seen

conservation

AU:26

ANON
1981
Roadsides: A Community Resource
Leaflet, Montrose Environmental Group

Victoria
general

Leaflet outlining principles of roadside vegetation conservation with practical advice for the lay person.

fauna, fire, native flora, weed control

AU:27

ANON
1983
Silver leaves as road safety aid
Trees and Victoria's Resources 25(3), 15

Victoria
general

The leaves of trees as nighttime reflectors could be an aid in reducing road accidents.

road safety

AU:28

ANON
1970
Roadside development manual
Country Roads Board, Victoria. 108 pp.

Victoria
management

Manual of CRB practices in planning road and bridge construction programme in harmony with rest of landscape, for conservation, erosion control, aesthetics and so on.

conservation,construction,planting,soil erosion,weed control

AU:29

ANON
1981
Roads of the past and Australian roads
Country Roads Board News 45, 8

Australia
general, management

not seen

history

OS:30

ANON
1976
Economic use of waste paper helps grass grow along roads
Better Roads 46(6), 30-31

USA
management

Effective mulch uses shredded scrap paper, latex compound (dispersing agent), water, seed and fertiliser. Spread by hydroseeder onto eroded slopes and cuts for ground cover.

fertiliser, seeding

OS:31

ANON
1984
More natural roadsides - within limits
Public Works 115(3), 62-65

USA
management

New brush-cutting machines used to control woody growth along roadsides allowed to revert to natural state. Use of growth retardents has declined due to cost.

mowing

OS:32

ANON
1984
Hydroseeding spray curbs dust, erosion
Better Roads 54(2), 28-29

USA
management

Soil stabilisation product applied to exposed soil bonds the soil particles and forms a crust of soil, seed, mulch and fertiliser.

fertiliser, seeding, soil erosion

OS:33

ANON
1980
Roadside maintenance: scientific procedures for highway departments
Better Roads 50(2), 29-31

USA
management

Discusses broad range of topics including use of herbicides mowing, signing, shoulder drainage, safety, equipment, and other subjects relating to the field together with analyses of cost-effectiveness of materials and procedures.

herbicide, mowing

OS:34

ANON
1970
Herbicides control roadside vegetation in California
Better Roads 40(2), 24-26

USA
management

More than 30 different herbicides and combinations of them are used for weed control on landscaped freeways in southern California. A guide for the use of herbicides on the highway

herbicide, weed control

OS:35

ANON
1975
Replacing grass with wood chips saves highway dollars
Better Roads 45(6), 21-23

USA
management

Case studies presented described the use of wood chips on highway embankments as an effective method of erosion control.

soil erosion

OS:36

ANON
1975
California's answer to roadside weed control
Better Roads 46(2), 22-23

USA
management

More herbicides and less mowing is shown to be one answer to handling weeds which damage roadside asphalt in California.

herbicide, mowing, weed control

OS:37

ARNOLD GW
1983
Influence of ditch & hedgerow structure, length of hedgerows and area of woodland and garden on bird numbers on farmland.
Journal of Applied Ecology 20, 731-750

UK
scientific

Analyses effects of structural characteristics of hedges and ditches on number and species of birds, and importance of some aspects of surrounding countryside. Discusses hedge management for bird habitat: no hedge type ideal for all.

birds, fauna, hedgerow

WA:38

ARNOLD GW, ALGAR D & HOBBS RJ
1986
A survey of the flora and fauna in road verges in the Kellerberrin District
Report to Roadside Vegetation Conservation Committee

Western Australia
scientific

Survey of type and condition of road verges in the WA wheat-belt. Little significance for small mammal conservation, but valuable for small birds and flora. Weed invasion and lack of shrub regeneration important areas for research.

corridor, fauna, native flora, weed

WA:39

ARNOLD GW, ALGAR D, HOBBS RJ & ATKINS L
1987
A survey of vegetation and its relationship to vertebrate fauna in winter on road verges in Kellerberin district, WA
Roadside Vegetation Conservation Committee.
Technical Report 18.

Western Australia
scientific

The survey covers 22 sections of road verge 1km long, ranging in width from 3.8m to 46.2m & varying in type (heath, mallee-heath & woodland. More species of birds were found in verges that were wide and covered with heath or mallee-heath

assessment, birds, small mammal

OS:40

ASH CPJ & LEE DL
1980
Lead, cadmium, copper and iron in earthworms from roadside sites
Environmental Pollution 22(1), 59-67

UK
scientific

Results showed that lead, cadmium and copper accumulated in the species tested. Only lead showed significant inter-specific variation. Iron was excreted.

invertebrate, lead

OS:41

ASHWORTH ST & CARVELL KL
1985
Invasion and establishment of native plants on southern Appalachian forest road banks
Castanea 50(1), 43-48

USA
scientific

A study of a 1.45km road bank which shows that sloughed root mats form centres of spread in revegetating areas that are still open, and that mats act to stabilise steep banks of disturbed soil.

native flora, rehabilitation, soil erosion

OS:42

BACHE DH & MACASKILL IA
1984
Vegetation in civil and landscape engineering
Granada Publishing. 317 pp.

UK
scientific

Discusses the wide range of applications for vegetation as engineering medium & evaluates role in environmental control Includes hydrology, drainage, slope stabilisation, shelter-belts, land rehabilitation, erosion and waste disposal.

landscape, pollution, shelterbelt, soil erosion

OS:43

BAKER M, REINERS AP & HAMMER LM
1973
Economic analysis of roadside beautification and recreational development
Department of Agricultural Economics, University of Nebraska
47 pp.

USA
management

Scaling techniques show that highway users prefer trees, plantings and a neat park-like appearance.

landscape

OS:44

BAKER RF
1983
Roadside vegetation: implementation of fine fescue grasses
Transportation Research Record 913, 23-28

USA
management, scientific

Study comparing grass mixtures for suitability for roadside planting. Evaluated for reduced mowing, appearance and establishment.

mowing, planting

AU:45

BARBER J
1982
Fire prevention and roadsides: the roadside as a firebreak
Paper presented at the Roadsides Symposium, City of Hamilton

Victoria
management

Effectiveness of firebreaks depends on location, area and manner of removing fuel. Appendix of criteria for assessing fire hazard rating.

fire, legislation

AU:46

BARBER JR
1977
Fire prevention as an essential factor in roadside management
Victoria's Resources 19(2), 18-21

Victoria
management

Guidelines for firebreak construction, such as ploughing, cool burns, mowing and thinning. Roadsides play important role in fire prevention. Firebreaks in any particular area must take account of fire risk and local environment.

fire

AU:47

BARNETT JL, HOW RA & HUMPHREYS WF
1978
The use of habitat components by small mammals in eastern Australia
Australian Journal of Ecology 3, 277-285

New South Wales
scientific

Effects of habitat components (vegetation density, litter, logs, roads) on four small mammals in native forest and pine plantation. Roads severely restricted or stopped small mammal movement even when unused or partly overgrown.

fauna, small mammal

OS:48

BATRA SWT
1981
Biological control of Carduus thistles along roadsides in north-eastern states
Transportation Research Record 805, 1-2

USA
scientific

Biological control of Carduus thistles along roadsides in Maryland and Pennsylvania using the European weevil Rhinocyllus conicus and the European beetle Trichosirocalus horridus.

biological control, weed control

OS:49

BAYFIELD NG
1980
Replacement of vegetation on disturbed ground near ski-lifts in the Cairngorm Mountains, Scotland
Journal of Biogeography 7, 249-260

UK
scientific

Disturbed ground and new road verges were seeded with lowland grasses. Although replacement with heather occurred within 8 years on lower ground, invasion other than by moss was very slow above 950m.

rehabilitation, seeding, soil erosion

AU:50

BAYNES E
1987
Roadside conservation and the firefighters' viewpoint
In: Roadsides conservation "asset or liability?"
Proceedings of a seminar held in Wodonga by the Wodonga Land Protection Regional Advisory Committee, Roadsides Conserv. Committee & Dept Conserv. For. & Lands (NE Region)

Victoria
management

not seen

fire

OS:51

BELL JH & WANIELISTA MP
1979
Affinity of roadside soils for lead, zinc, and chromium
Fla. Sci. 42(1,suppl.), 39

USA
scientific

Testing for pH, cation exchange, organic matter content, grain size and concentration of lead, zinc and chromium. Metal retention improved in areas where organic matter was present and overland flow was allowed.

lead, pollution

AU:52

BELL LC & WYLIE PB
1973
The effect of automobile emissions on the lead content of soils and plants in the Brisbane area
Search 4, 161

Queensland
scientific

Levels of lead in soil and plants adjacent to highways of moderate traffic near Brisbane are not currently a threat to plants, animals or humans, but may continue to build up with increasing traffic.

lead, pollution

OS:53

BELLIS ED & GRAVES HB
1978
Highway fences as deterrents to vehicle-deer collisions
Transportation Research Record 674, 53-58

USA
management

Highway fencing may have little value as deterrent as many deer crawl underneath. High traffic volumes may prevent deer moving onto highway thus reducing collisions.

fauna, road-kill

OS:54

BENES J
1982
Erosion along forest roads under construction and due to transport
Lesnictvi 28(7), 539-554

Czechoslovakia
scientific

Seven gravitational territories of the total area of 4900ha forest land were examined. The condition of hauling and skidding roads, erosion control along these roads and a proportion of devastated forest land were evaluated.

soil erosion

AU:55

BENNETT A
1981
Roadside verges as a habitat for mammals in south-western Victoria
Bulletin of the Australian Mammal Society 7, 17-18

Victoria
scientific

Small forest patches are linked by forested road verges acting as corridors. 18 of the 24 mammal species in the area used the road verge habitat, either for moving around, food, hunting, refuge, or for all requirements.

corridor, fauna, small mammal

AU:56

BENNETT A
1982
Roadsides as wildlife habitat
Paper presented at the Roadsides Symposium, City of Hamilton

Victoria
general, management

not seen

conservation, fauna

AU:57

BENNETT AF
1988
Roadside vegetation: a habitat for mammals at Naringal, South-Western Victoria
Victorian Nat. 105(5), 106-113

Victoria
scientific

A wide range of mammal species use roadside vegetation as a corridor to facilitate dispersal between otherwise isolated populations in forest patches.

conservation, corridor, fauna

OS:58

BERGER RL
1985
Washington State manages roadsides for long term
Roads and Bridges, February 1985, 18-19

USA
management

Washington State roadside management concept divides roadside into three functional zones with distinct objectives that guide the vegetation management. Discusses herbicides, tree cutting, and fertilisers.

fertiliser, mowing, weed control

OS:59

BERGSTROM KL
1971
Utilization of interstate highway construction to create productive wetlands for wildlife
Massachusetts University Water Resources Research Center Report. 72 pp.

USA
management

Productive wetlands can be created with minimal expense if developed as integral part of highway. Benefits include scenic and recreational as well as wildlife habitat.

construction, wetlands

AU:60

BESWICK J & MORAN P
1985
Re-establishment of roadside vegetation along the Dukes Highway
In: Venning J (Ed.) Revegetation workshop: direct seeding & natural regeneration techniques. Proceedings of workshop held by Department of Environment and Planning, SA, and Greening Australia, SA, Adelaide. pp 47-50

Victoria
management

Describes native seeding programme along roadside and variations in re-establishment techniques.

rehabilitation, seeding

OS:61

BICKNELL SH & SMITH WH
1975
Infl. of soil salt, at levels characteristic of some road-side environments, on the germination of certain tree seeds
Plant Soil 43(3), 719-722

USA
scientific

The highest salt levels caused reduced germination of Betula alleghaniensis, Catalpa bignonioides, Quercus coccinea & Q. cerris. Ailanthus altissima, Pinus rigida & Gleditsia triacanthos were relatively unaffected.

salinity

OS:62

BIERSDORF GT, BROWER DL, LAGERWERFF JV & MILBERG RP
1980
Soil lead accumulation alongside a newly constructed roadway
Journal of Environmental Quality 9, 6

USA
scientific

Lead accumulation in soil along a new section of highway monitored annually 1971-77. Increase in lead in top 10cm closely correlated with cumulative amount of leaded-fuel burning traffic.

lead, pollution

AU:63

BIRD R
1983
Managing the last resource
Trees and Victoria's Resources 25(4), 28-30

Victoria
management

Recommends co-ordinated action for the conservation of road-side native vegetation. Suggests that there be a single body which has authority to set overall objectives, assess conservation status, and provide guidelines to users.

conservation, fire, grazing, native flora, seeding, weed

AU:64

BIRD R
1982
Indigenous vegetation: road and rail reserves for conservation purposes, grazing of reserves
Paper presented at the Roadsides Symposium, City of Hamilton

Victoria
management

Recommends elimination of grazing, that firebreaks be slashed or burned rather than cultivated and that offending farmers be prosecuted.

fire, grazing, legislation

OS:65

BIRDSALL CW, GRUE CE & ANDERSON A
1986
Lead concentration in bullfrog Rana catesbeiana and green frog R. clamitans tadpoles inhabiting highway drainages
Environmental Pollution 40(3), 233-247

USA
scientific

Lead concentrations in sediment and in both species of tadpoles were positively correlated with average daily traffic volume.This may contribute to the elevated lead levels reported in wildlife that are potential tadpole predators.

fauna, lead, pollution

AU:66

BISHOP HG
1981
Grader grass - a nuisance weed
Queensland Agricultural Journal 10, 235-239

Queensland
management

Grader grass spreads along disturbed areas such as roadsides and railsides and is a nuisance weed in pastures. Control by avoiding: grass fires, heavy stocking, short mowing and soil disturbance, and spot control by chemicals.

weed control

OS:67

BLAHA W
1975
Organisation of building sites and introduction of machinery in forest roadway construction
Allg. Forstzg. 86(11), 336

Austria
general, management

Discusses planning, supervision of road construction and the machinery used. Stresses organisation which will best preserve the landscape.

conservation, construction

OS:68

BLAIR GB & TATE GI
1972
Practical aspects of managing roadside cover for nesting pheasants
Journal of Wildlife Management 36, 1-11

USA
management

Pheasant production on roadsides can be increased by seeding grass-legume mixture. Paper evaluates cost and acceptance of management practices by farmers.

birds, fauna

AU:69

BLEAKLEY HG
1980
Roadsides: upgrading "the front garden"
Victoria's Resources 22(4) 30-31

Victoria
general, management

Results of competition for Victorian Roadsides Environmental Awards, for natural environment, historical or cultural environment, and enjoyment of road user. Descriptions of winning entries.

conservation

OS:70

BODDY FA
1968
Highway trees
Clarke and Hunter (London) Ltd. 46 pp.

UK
management

Practical guidelines for selection, siting, planting, pruning and maintenance of street trees.

planting, road safety

OS:71

BOFFA MISKELL PARTNERS LTD & GECO NZ
1988
Expanding system capacity- a computer aided transmission line corridor study ...
TransPower NZ Ltd. 121 pp.

NZ
management

Develops a data base which assists with the planning of transmission lines. Considers engineering factors and environmental factors (visual, social, land use, biological)

conservation, planning

OS:72

BOLLAND AH
1970
Weed control in Minnesota
Public Works 101(12), 57-58

USA
management

Preventive weed control on new roadsides includes tilling the borrowed topsoil before planting grass seed. Recommended herbicide equal parts 2,4-D and 2,4,5-T. Weed free turf also reduces weed problem.

herbicide, weed control

OS:73

BOLSINGER M & FLUECKIGER W
1987
Enhanced aphid infestation at motorways: the role of ambient air pollution
Entomol. Exp. Appl. 45(3), 237-243

Switzerland
scientific

Plant-insect interaction is imbalanced when plants take up nitrogen from ambient air on motorways.

invertebrate, pollution

OS:74

BONES J
1975
Riotous flora by a Texas wayside
Audubon 77(4), 32-39

USA
general

Fences, railroads and highways have helped preserve many wildflowers, but injudicous use of herbicides and mowing are posing new threats to their survival.

herbicide, mowing, native flora

WA:75

BOTTOMLY LA & BOUJOS LP
1975
Lead in soil of Heirisson Island, Western Australia
Search 6, 389-390

Western Australia
scientific

Present lead levels are lower than some Australian sites and considerably lower than extreme values for heavily urbanised areas in other countries.

lead, pollution

OS:76

BOURQUIN J-D & MEYLAN A
1982
Small mammal communities along divided highways: faunas and examples of spatial distribution of Microtus arvalis
Rev. Suisse Zool. 89(4), 977-991

Switzerland
scientific

Points to the relative abundance of the common vole, the water vole, the Northern mole. the wood mouse and the great white-toothed shrew. Describes their geographical distribution according to the different habitats.

small mammal

OS:77

BRAMBLE WC & BYRNES WR
1982
Dev. of wildlife food and cover on an electric transmission right-of-way maintained by herbicides: a 30 year report
Agricultual Experiment Station, Indiana. Bulletin 974.
24 pp.

USA
scientific

Use of herbicides 2,4-D, 2,4,5-T and ammonium sulfamate resulted in shift from a dominance of forest species to a codominance between forest plants and species of openings.

fauna, herbicide

OS:78

BRAUN S & FLUECKIGER W
1984
Increased population of the aphid Aphis pomi at a motorway: Part 1. Field evaluation
Environmental Pollution 33(2), 107-120

Switzerland
scientific

Reduced efficiency of natural enemies at motorway may be more important than changes in host plant biochemistry in contributing to the increased infestation.

invertebrate

AU:79

BRECKWOLDT R
1983
Wildlife in the home paddock: nature conservation for Australian farmers
Angus & Robertson Publishers, Melbourne

Australia
general, management, scientific

Includes a chapter on the importance of corridors to wildlife in rural areas, including roadside verges and road reserves. Ideally corridors should be as dense, wide and continuous as possible and should link isolated habitats.

conservation, corridor, fauna

AU:80

BRECKWOLDT R
1986
The last stand: managing Australia's remnant forests and woodlands
National Tree Program / Department of Arts, Heritage and Environment. Australian Government Publishing Service, Canberra.

Australia
general, management

Outlines the benefits of remnant forests and woodlands, the threats facing them, and practical management techniques for landholders, local government managers and others. Roadside verges and railsides contain valuable remnant vegetation.

disease, fauna, fire, genetics, salinity

AU:81

BRENNAN N
1983
Greening Australia: The Men of the Trees
Local government role in National Tree Program
Australian Parks and Recreation August 1983, 46-50

Australia
general, management

Two articles summarising 1.history and activities of The Men of the Trees, and 2. local government involvement in the National Tree Program, including modifying management practices along roadsides.

conservation, legislation

AU:82

BRIDGEWATER PB
1987
Connectivity: An Australian Perspective
In: Saunders DA, Arnold GW, Burbidge AA & Hopkins AJM (Eds). Nature conservation: the role of remnants of native vegetation. Surrey Beatty & Sons Pty Ltd. pp 195-200

Australia
scientific

Discusses the natural and cultural corridors (including roadsides) which form networks of links between vegetation remnants and their importance to wildlife. Outlines their importance to management of remnants.

corridor, hedgerow, landscape

OS:83

BRIGGS D
1978
Genecological studies of salt tolerance in groundsel with particular reference to roadside habitats
New Phytol. 81(2), 381-389

UK
scientific

Critical examination of the finding that topodemes from sites subject to salting are, in general, more salt tolerant than those from non-salted areas. Genecological implications of salt tolerance patterns are discussed.

salinity

AU:84

BRINDLE R
1986
Roadsides - the wider context
Trees and Natural Resources 28, 12-15

Australia
general, management

Suggestions for roadside planning and management to take into account landscape and visual qualities.

history, landscape

AU:85

BROADBENT JA, PRESSEY R, EHMANN H, IVANTSOFF W, JONES A & WILLIAMS R
1981
Faunal studies for the proposed Wahroona-Berowra section of the Sydney-Newcastle freeway No. 3
Environmental and Urban Studies Report No. 68, Macquarie University, North Ryde. Prepared for the Department of Main Roads, New South Wales

New South Wales
management, scientific

Potentially most severe impact will be erosion of earthworks and sedimentation of creeks. Recommends minimum possible new construction, and other mitigating factors.

construction, fauna, pollution, soil erosion

OS:86

BURKE RC II & SHERBURNE JA
1982
Monitoring wildlife populations and activity along I-95 in northern Maine before, during and after construction
Transportation Research Record 859,1-8

USA
scientific

Effect on breeding-bird and mammal populations limited to immediate loss of habitat. Other species have moved into the newly created habitats. Effects of highway as physical barrier not known yet.

birds, fauna, small mammal

OS:87

BURKHARDT JP & MORRE DJ
1986
Chemical mowing in Indiana: three years of success
In: Roadside design and management,
Transportation Research Record 1075, 15-18

USA
management

This programme was designed primarily for use on tall fescue-bluegrass mixed turf and resulted in both seedhead suppression and weed control in excess of 90%

herbicide, mowing

WA:88

BUSH FIRES BOARD OF WESTERN AUSTRALIA
1985
Care of roadside vegetation
Bush Fire Notes No. 12

Western Australia
general, management

Summarises reasons for conserving road verge vegetation and problems of too-frequent burning. Gives classification of road verge condition and guidelines for burning.

fire, weed control

AU:89

BUSHBY J
1985
Roadside management for fire prevention
In: Managing roadside vegetation: what part do herbicides play? Paper from a workshop and fieldday at Ballarat College of Advanced Education. Roadsides Conservation Committee. pp 9-13

Victoria
management

Considers that the whole community should take on the responsibility of fire prevention. Burning costs and effectiveness are considered as well as the use of herbicides.

fire

OS:90

BUTLER JD
1972
Salt-tolerant grasses for roadsides
Highway Research Record 411, 1-6

USA
management, scientific

Deicing chemicals destroy roadside vegetation. Growth characteristics and habitats of salt-tolerant grasses are discussed.

salinity

AU:91

CABENA P
1985
Unused roads in Victoria: a historical and geographic assessment and management critique
Discussion paper, Department of Conservation, Forests and Lands, Victoria

Victoria
management

Discusses history and geography of unused roads (land set aside for roads but never used). Presents critique of their past and present management and legislation with suggestions for future change.

history, legislation

OS:92

CARBAUGH BT, VAUGHAN JP, BELLIS ED & GRAVES HB
1975
Distribution and activity of white-tailed deer along an interstate highway
Journal of Wildlife Management 39, 570-581

USA
scientific

Highway now a common part of deer environment. Impact of highway on deer abundance and distribution relates to highway location relative to deer feeding and resting sites, and to availability of feeding areas other than roadside.

fauna, road-kill

AU:93

CARR G
1987
The ecological values of roadsides
In: Roadsides conservation "asset or liability?"
Proceedings of a seminar held in Wodonga by the Wodonga Land Protection Regional Advisory Committee, Roadsides Conserv. Committee & Dept Conserv. For. & Lands (NE Region)

Victoria
general

not seen

conservation

OS:94

CARR WW & BALLARD TM
1980
Hydroseeding forest roadsides in British Columbia for erosion control
J. Soil Water Conserv. 35(1), 33-35

Canada
scientific

Results showed that a single application of both seed and fertiliser was as effective as sequential application of seed and fertiliser. Mulching proved unnecessary.

fertiliser, seeding, soil erosion

OS:95

CASSIDY DV
1982
How research benefits California's roadsides
Transportation Research Record 859, 14-15

USA
scientific

Describes 7 research projects on development of nonchemical pest management. CalTrans (transport authority) policy is to retain as much native vegetation as possible on highway roadsides.

biological control, pest control, weed control

OS:96

CENDRERO A, ANTON R , SAIZ DE OMENACA J
1977
Geochemistry of bedrock; its effect on the planting and maintenance of roadcuts along the Bilbao-Behobia motorway
Landscape Plann. 4(2), 113-183

Spain
scientific

The death of vegetation on roadcuts along a roadway in Northern Spain was due to production of sulphuric acid upon the weathering of iron sulphides present in the rock. Possible corrective measures are proposed.

disease, landscape, planting

OS:97

CHADWICK CR
1975
Verges and the highway
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
management

Types of road, types and functions of road verges and verge maintenance from the point of view of the highway authority.

construction

OS:98

CHANCELLOR RJ
1969
Road verges - the agricultural significance of weeds and wild plants
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
management

Survey of weeds present along roadsides, their capability of spreading into adjacent farmland, and their importance as agricultural weeds. Appears they are generally not a serious threat to agriculture.

weed control

AU:99

CHANDLER B
1980
Effects of roadworks on road reserves
Paper presented at the Roadsides Conservation Committee Field Day and Seminar, July 1980

Victoria
management

not seen

construction

OS:100

CHOW TJ
1970
Lead accumulation in roadside soil and grass
Nature 225, 295-296

USA
scientific

Pattern of lead distribution along roadsides caused by direction of prevailing winds and content to traffic volume. Lead accumulates near soil surface and is not very mobile. Lead in grass derived from surface soil and direct fallout.

lead, pollution

OS:101

CLARK WD & KARR JR
1979
Effects of highways on red-winged blackbird and horned lark populations
Wilson Bull. 91(1), 143-145

USA
scientific

Data demonstrates that highways affect abundance of bird species and that the effect varies with species, highway type, season, and distance from the highway.

birds, construction

OS:102

CLARY RF JR & SLAYBACK RD
1984
Plant materials and establishment techniques for revegetation of California desert highways
Transportation Research Record 969, 24-26

USA
management

Trials of plants for roadside revegetation in the desert using planting and direct seeding.

planting, rehabilitation, seeding

OS:103

CLARY RF JR & SLAYBACK RD
1984
Plant materials and establishment techniques for revegetation of California desert highways
Transportation Research Record 969, 24-26

USA
scientific

Direct seedings of herbaceous perennials were largely unsuccessful.

rehabilitation, seeding, soil erosion

AU:104

CLIFT D, DICKSON IE, ROOS T, COLLINS P, JOLLY M & KLINDWORTH A
1983
Accumulation of lead beside the Mulgrave Freeway, Victoria
Search 14, 155-157

Victoria
scientific

Lead concentration in soils beside the Mulgrave Freeway was monitored from June 1975 (opened) to Sept 1980. Distribution of lead was influenced by prevailing winds and height of the vegetation.

lead, pollution

OS:105

CODY JB & QUIMBY JR
1975
Vegetation management on utility rights-of-way: an annotated bibliography
Applied Forestry Research Institute Report No. 27, State University of New York, Syracuse. 56 pp.

USA
management

not seen

bibliography, weed control

OS:106

COLE FD
1967
Establishment of roadside vegetation for Arizona highways
Arizona University, Tucson, Department of Horticulture/
Bureau of Public Roads, Washington DC. Project HPR - 1(3)
57 pp.

USA
management, scientific

Lists and describes species of native woody and herbaceous plants which have potential for use in arid regions of the SW of USA. Describes propagation and establishment techniques.

planting, seeding

OS:107

COLWILL DM (ED.), THOMPSON JR & RUTTER AJ
1978
Impact of road traffic on plants
Proceedings of symposium, British Ecological Society/
Transport and Road Research Laboratory, Workingham, England

UK
scientific

18 papers covering research where highways, traffic and plants interact. Includes summaries and shortened versions of the papers.

conservation, landscape

OS:108

COMMISSION ON HIGHWAY BEAUTIFICATION
1972
Hearings before the Commission on Highway Beautification
Atlanta, Georgia

USA
management

These public submissions focus on the conflict of interest between conservationists and those involved in outdoor advertising and the provision of roadside rest areas.

conservation, landscape, legislation

WA:109

COMMITTEE ON ROAD VERGES, WA
1970
Conservation of road verges
Committee on Road Verges, WA

Western Australia
general, management

Examines existing road system and verges and recommends actions which could produce better conservation of roadside flora.

conservation, fire, native flora, weed control

OS:110

CONYERS T
1986
Hedgerow and ditch removal in south-east Essex, England, 1838-1984
Biological Conservation 38, 233-242

UK
scientific

Documents history of hedgerow removal in south-east Essex and suggets removal will continue as small farms amalgamate.

corridor, hedgerow

AU:111

COOKE BD
1981
Rabbit control and the conservation of native mallee vegetation on roadsides in South Australia
Australian Wildlife Research 8, 627-636

South Australia
management, scientific

Numbers of rabbits on some mallee covered roadsides were significantly reduced without damaging unduly the native vegetation, resulting in higher crop production. Combination of poisoning, warren ripping and warren fumigation necessary

native flora, pest control, rabbit

AU:112

COOKE BD
1983
Rabbit control and the conservation of native vegetation on roadsides
In: Vandersommen FJ (Ed.) Trees in the rural environment: towards a greenprint for South Australia. Faculty of Natural Resources, Roseworthy Agricultural College

South Australia
management

not seen

native flora, pest control, rabbit

OS:113

CORNWALLIS RK
1969
Road verges and the farmer
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
management

Rights and obligations of the farmer in managing and using the road verge.

grazing, mowing

AU:114

CORREY A
1972
Trees in streets rethought
Architecture in Australia 61(5), 535-546

Australia
general, management

Aims to set out some of the design principles which could be adopted for most Australian streets. Many clear diagrams.

landscape, planting

AU:115

COTTINGTON M
n.d.
Roadside vegetation: a selective bibliography
Department of Environment and Planning, Adelaide

Australia
bibliography

Approx 170 references covering most aspects of roadside vegetation, in Australia and overseas, and legislation relating to South Australia.

bibliography, planting, weed control

AU:116

COULSON GM
1982
Road-kills of macropods on a section of highway in central Victoria
Australian Wildlife Research 9, 21-26

Victoria
scientific

20-km section of highway surveyed over 5 years. Recorded 7 swamp wallabies and 37 eastern grey kangaroos. Most roos killed were adult male and most killed around full moon. Most kills where farmland on one side, woodland on other.

fauna, road-kill

AU:117

COUNTRY ROADS BOARD, VICTORIA
1970
Roadside development manual
Country Roads Board, Victoria. 108 pp.

Victoria
management

Promotes the planned roadside development of the Board's road system. Includes photographs and clear diagrams with overlays.

mowing, pest control, planting, soil erosion, weed control

AU:118

COWDELL I
1977
Roadside evaluation
Victoria's Resources 19(2), 5-6

Victoria
general

Role of Roadsides Conservation Committee in promotion of conservation in roadside decision-making and public education.

assessment, conservation

AU:119

COWDELL I
1985
Controls and legislation over roadsides
In: Managing roadside vegetation: what part do herbicides play? Papers from a workshop and fieldday at Ballarat College of Advanced Education. Roadsides Conservation Committee. pp 5-7

Victoria
management

Summarises the 1983 report of the Roadside Flora Legislation Committee and reflects on the meaning of a 1985 ALP policy statement which calls for a Roadsides Conservation Plan.

conservation, legislation

AU:120

COWDELL I
1982
The Roadsides Conservation Committee
Paper presented at the Roadsides Symposium, City of Hamilton

Victoria
management

Outlines the aims and activities of the committee. Urges local solutions to local problems.

planning

OS:121

COX BE
1977
Economics of roadside mowing
Transportation Research Record 647, 27-29

UK
management

Reviews some highway authority standards for grass, tree and hedge cutting along roadsides. Summarises the UK national criteria laid down in the Marshall report.

mowing, legislation

AU:122

CROSSEN TI
1988
Street trees: a guide to planting and management
Australian Horticulture 59-61, 82

Australia
management

Considers the problems of traffic, sewers and drainage and "human factors". Includes advice on tree planting and pruning.

landscape, planting

OS:123

CRUMP DR, BARLOW PJ & VAN REST DJ
1980
Seasonal changes in the lead content of pasture grass growing near a motorway
Agric. Environ. 5(3), 213-225

UK
scientific

The 10-fold seasonal variation in the lead content of perennial rye grass was mainly a result of changes in the growth form of the plant, rather than a result of seasonal changes in atmospheric lead concentration and lead uptake.

grazing, lead, pollution

OS:124

CUSICK AW
1984
Carex praegracilis: a halophytic sedge naturalized in Ohio
Mich. Bot. 23(3), 103-106

USA
scientific

The eastward expansion of Carex praegracilis appears directly related to the use of road deicing salts. It is located along verges of major highways on soils of extreme salinity.

salinity

OS:125

DAMBACH CA
1951
Roadside use has a part in the conservation program
In: The tenth short course on roadside development, Department of Landscape Architecture, Ohio State University/ Ohio Department of Highways. pp 16-22.

USA
management

Recommendations to improve roadsides for conservation purposes.

conservation, fauna, herbicide, mowing

AU:126

DAVID DJ & WILLIAMS CH
1975
Heavy metal contents of soils and plants adjacent to the Hume Highway, near Marulan, New South Wales
Australian Journal of Experimental Agriculture & Animal Husbandry 15, 414-418

New South Wales
scientific

Zinc, lead, cadmium and copper concentrations in soil and bracken were measured along leeward sides of Hume Highway, a site of heavy traffic. Most remained in surface layers of soil, and no contamination found beyond 25m from highway.

lead, pollution

AU:127

DAVID G
1984
Children plant to help "Halt the Salt".
Trees and Victoria's Resources 26(3), 16

Victoria
general

Brief details of a school tree planting project in N. Victoria, on a roadside reserve in an area with salinity problems. Project will help to increase community awareness and involvement.

planting, salinity

OS:128

DAVISON AW
1971
The effects of deicing salt on roadside verges 1. Soil and plant analysis
Journal of Applied Ecology 8, 555-561

UK
scientific

Sufficient deicing salt persists at most roadside sites to affect vegetation by causing osmotic stress and altering nutrient balance - may thus influence vigour and species composition of vegetation.

salinity

AU:129

DEPARTMENT OF ARTS, HERITAGE AND ENVIRONMENT / INSTITUTE OF FORESTERS AUSTRALIA
1985
Think trees: grow trees
Australian Government Publishing Service, Canberra

Australia
general, management, scientific

Role of trees in Australia's rural and urban environments, advice on growing them and the importance of continuing conservation. Includes road verges and shelterbelts, and use of fire.

fauna, fire, shelterbelt, planting

AU:130

DEPARTMENT OF CONSERVATION FORESTS AND LANDS, PORTLAND REGION
1987
Assessment of the conservation value of roadside vegetation in the Shire of Wannon, Victoria
Department of Conservation Forests and Lands. 35 pp.

Victoria
management

The report outlines the methodology, summarises results in both tabular and mapped format, provides management guidelines and discusses the broader role of "conservation" within the Shire of Wannon.

assessment, conservation

WA:131

DEPARTMENT OF CONSERVATION AND ENVIRONMENT, WA
1985
Roadworks and wetlands in the Perth metropolitan region: recommendations for conflict resolution
Department of Conservation and Environment, WA, Bulletin No. 233

Western Australia
management

Identifies 180+ locations in Perth metro area where future roadworks may intersect wetlands. Range of possible effects of roadworks listed. Wetland survey required to locate and assess their future conservation potential.

assessment, planning, wetlands

WA:132

DEPARTMENT OF CONSERVATION AND ENVIRONMENT, WA / ENVIRONMENTAL PROTECTION AUTHORITY, WA
1984
Report and analysis by the EPA on Farrington Road-North Lake Consideration of additional info. from public submissions
Department of Conservation and Environment, WA, Bulletin No. 179

Western Australia
management

This report details the public submissions made for and against extensions to Farrington Road being constructed through wetlands many people think should be protected area.

planning, wetlands

WA:133

DEPARTMENT OF CONSERVATION AND ENVIRONMENT/ DEPARTMENT OF AGRICULTURE/ FORESTS DEPARTMENT, WA
1982
Trees in the rural landscape
Proceedings of a conference held in Perth, WA, October 1981. WA. 286 pp.

Western Australia
management

33 papers dealing with the role of trees on farms. Deals with soil conservation, windbreaks, salinity, wildlife, road verges, tree planting and agroforestry.

salinity, shelterbelt, soil erosion

WA:134

DEPARTMENT OF CONSERVATION AND ENVIRONMENT/ MAIN ROADS DEPARTMENT, WA
1984
Environmental assessment of roadworks: guidelines for local authorities
Department of Conservation and Environment, WA, Bulletin No. 184

Western Australia
management

Summarises possible environmental effects of road construction and maintenance and presents guidelines for assessment categories. Includes sample assessment forms and environmental checklist.

assessment, construction

WA:135

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT, WA
1988
The road, river and stream zone system in the southern forest of Western Australia - a review
Department of Conservation and Land Management

Western Australia
management

It is now proposed that the entire area which is presently allocated to road, river and stream zones be re-distributed to achieve the best possible conservation, amenity and hydrologic result.

conservation, planning

WA:136

DEPARTMENT OF FISHERIES AND WILDLIFE, WA
1981
A survey method for identifying roadside flora for conservation in Western Australia
Department of Fisheries and Wildlife. Report 41.

Western Australia
management

not seen

assessment, native flora

WA:137

DEPARTMENT OF FISHERIES AND WILDLIFE, WA
1983
Re-establishing local trees and shrubs on farms
Department of Fisheries and Wildlife, WA

Western Australia
general, management

This leaflet discusses briefly the special values of local trees and shrubs and then explains how to re-establish them on farms. Contains a section on road verges.

native flora, rehabilitation

OS:138

DEPARTMENT OF HIGHWAYS, TENNESSEE
1970
Mowing standards
Division of Roadside Development. 18 pp.

USA
management

The implementation of the standards which aim to reduce costs, increase efficiency and promote uniformity of practice.

mowing

AU:139

DEPARTMENT OF MAIN ROADS, NSW
1960
Roadside trees
Manual No. 4. 36 pp.

New South Wales
management

Instruction manual in selection, planting, maintenance, trimming, pruning and lopping of trees. For use by authorities concerned with erection and maintenance of overhead transmission lines.

planting, road safety

AU:140

DEPARTMENT OF MAIN ROADS, NSW
n.d.
Roadmaking and tree planting: Department's dual duties
Main Roads Department, NSW. 4 pp.

New South Wales
general, management

Deals with selection of species and problems of planting. Mentions departmental nursery and specific planting projects undertaken 1971-72.

planting

OS:141

DEPARTMENT OF TRANSPORTATION, USA
1971
The highway and its environment: fourth annual awards competition
Federal Highway Administration. 26 pp.

USA
general

Shows the 32 award-winning selections from 11 categories. Includes photographs.

conservation, landscape, road safety

OS:142

DERNOEDEN PH & FRY JD
1986
Postemergence control of crabgrass in transition zone turf using MSMA and fenoxaprop
In: Roadside design and management,
Transportation Research Record 1075, 1-4

USA
scientific

The erratic performance of fenoxaprop in control of mature crabgrass was attributed to environmental conditions as such conditions affected the vigor of crabgrass.

herbicide

OS:143

DEVON COUNTY COUNCIL
1982
The management of urban and rural roadside verges in Devon
Devon County Council

UK
management

A summary of the policies adopted by the Devon County Council following recommendations made by a working party appointed to look into all aspects of the treatment of urban and rural roadside verges.

mowing

OS:144

DIMITRI PL
1981
Effect of melting salt on trees and other vegetation
Report of the Forestry Department of the Commisssion of the European Communities at Brussels
Eur. J. For. Pathol. 11(3), 137-152

Belgium
scientific

Describes the effects of the chemical composition, quality, consumption and sequences of application of thawing salts on soil, trees and other vegetation.

salinity

AU:145

DISNEY HJ DE S & FULLAGER PJ
1978
A note on road-kills
Corella 2, 89

New South Wales, Victoria
scientific

Survey on Hume Highway between Yass, NSW and Seymour, Vic. 1 bird killed every 12km in spring, 33km in autumn; 1 mammal every 45km in spring & 35km in autumn. More predators and scavengers killed in autumn. Magpies commonest birds.

fauna, road-kill

OS:146

DIXON EC & DICKENS R
1986
A vegetation management program for Alabama highway roadsides
In: Roadside design and management,
Transportation Research Record 1075, 5-10

USA
management

Promotes reallocation of work loads and reduced mowing.

herbicide, mowing

OS:147

DOLLING HD
1986
Aerial seeding
In: Roadside design and management,
Transportation Research Record 1075, 31-34

USA
management

Applying seed by aerial means when the ground is loose and friable from frost action, usually during the month of March, is cost effective.

fertiliser, seeding

AU:148

DOWSLEY K
1980
Roadsides from the point of view of adjacent farmers
Paper presented at the Roadsides Conservation Committee Field Day and Seminar, July 1980

Victoria
management

not seen

conservation, weed control

AU:149

DUCKETT TAP
1987
Revegetation of disturbed sites in Tasmania with native species: a practical guide
Department of the Environment, Tasmania. 67 pp.

Tasmania
management

Provides information to help develop a practical and therefore economical revegetation strategy for the rehabilitation of disturbed sites throughout Tasmania. Gives relevant growth details for 60 native plants.

native flora, rehabilitation

OS:150

DUECK TA, ENDEDIJK GJ & IKKINK HGK
1987
Soil pollution and changes in vegetation due to heavy metals in sinter-pavements
Chemosphere 16(5), 1021-1030

Netherlands
management, scientific

The use of heavy metal-contaminated sinters from a zinc smelter for paving roads, has resulted in changes in the species richness and genetic constitution of the roadside vegetation.

genetics, pollution

OS:151

DUNBALL AP
1978
Establishing trees on difficult sites- motorway planting
Sci. Hortic. 29(4), 171-177

UK
management

Details are given for the selection of the right species, the acquisition of suitable stocks, good ground preparation, careful planting and adequate maintenance.

planting, rehabilitation

OS:152

DYRNESS CT
1975
Grass-legume mixtures for erosion control along forest roads in western Oregon
J. Soil Water Conservation 30(4), 169-173

USA
scientific

Despite successful germination and early establishment, legumes were unable to compete with grasses and largely disappeared from most roadside stands.

germination, planting, soil erosion

AU:153

EDWARDS G
1984
Incremental development, or How the Black Stump Utility Authority manages its rights-of-way
In: At Ground Level: a workshop on restoring local vegetation. Roadside Conservation Committee/ Department of Conservation, Forests and Lands, La Trobe University, Victoria

Victoria
general

A cynical look at the hazards to reserves posed by utility authorities.

conservation, planning, road safety

AU:154

EDWARDS GP
1977
Roadside hygiene
Victoria's Resources 19(2), 22-24

Victoria
general, management

Natural vegetation along roadsides is being lost through weed invasion, grazing, clearing, fertiliser, gravel, burning and disease. Gives hygiene precautions.

disease, fertiliser, fire, weed control

AU:155

EDWARDS GP
1975
Strips, patterns and spots: some thoughts on the management of natural vegetation in small reserves
Victoria's Resources 17, 8-12

Australia
general, management

Brief account of the value of native vegetation on roadsides and the management implications.

native flora

AU:156

EDWARDS GP
1974
Roadside hygiene - Part 2, the cinnamon fungus
In: Forum on roadsides and conservation. Proceedings of a conference held by VNPA, NRCL, CCV and TCPA.

Victoria
management

Discusses dieback, roads as vectors for disease, and hygiene recommendations for roadmakers and motorists.

construction, disease

WA:157

EDWARDS M & GARDNER J
1984
Cottesloe Road Verge Reserve
In: Moore SA (Ed) The management of small bush areas in the Perth metropolitan region. Proceedings of a seminar held on 20 Sept 1983 by the Department of Fisheries and Wildlife
pp 71-72

Western Australia
general

Discusses development of a flora reserve along Broome St in Cottesloe. Area is weeded by hand, rubbish removed, and local species have been planted.

native flora

OS:158

ELDRIDGE J
1971
Some observations on the dispersal of small mammals in hedgerows
Journal of Zoology 165, 530-534

UK
scientific

Hedgerow rodent population does not seem to behave differently from woodland populations.

hedgerow, small mammal

AU:159

ELECTRICITY TRUST OF SOUTH AUSTRALIA
1984
Tree cutting and clearances to power lines
Distributional Instruction 3A6L

South Australia
management

Supersedes instruction issued in 1982. Outlines responsibilities of Council and landholder and provides guidelines for tree inspection, trimming and disposal.

clearing, road safety

AU:160

ELECTRICITY TRUST OF SOUTH AUSTRALIA
n.d.
Tree planting guide
Electricity Trust of South Australia

South Australia
management

Advice on the selection, siting and maintenance of trees in the vicinity of power lines.

planting, road safety

OS:161

ELLER BM
1977
Road dust induced increase of leaf temperature
Environmental Pollution 13, 99-107

Switzerland
scientific

Dust cover on leaves increases their absorptivity and thus increases leaf temperature influencing plant productivity.

pollution

AU:162

ELTON DJR
1987
Environmental guidelines for roads and tracks
Department of the Environment, Tasmania. 89 pp.

Tasmania
management

Provides advice to those involved in the construction of tracks and roads on how to minimise the environmental and visual impacts of construction. Includes useful diagrams.

conservation, construction, rehabilitation

AU:163

ENERGY AUTHORITY OF NSW
1985
Guidelines for tree planting & maintenance safety clearances near power lines: for Electricity Supply & Local Govt
Energy Authority of NSW

New South Wales
management

Policies & procedures for tree pruning in the interests of public safety. The appendix includes a listing of trees and shrubs suitable for planting under or near overhead power lines.

planting, road safety

AU:164

ENERGY AUTHORITY OF NSW
1983
Tree trimming near powerlines- guidelines
Energy Authority of NSW. 21 pp.

New South Wales
management

Outlines policies, responsibilities and guidelines for rural areas.

road safety

AU:165

ERIKSSON SCB & MATTHEWS RS
1974
Planning with regard to the roadside environment
In: Forum on roadsides and conservation. Proceedings of a conference held by VNPA, NRCL, CCV and TCPA.

Victoria
management

Discusses planning of major highway facilities in rural areas, particularly Victoria

construction, history, landscape, planning

AU:166

ERIKSSON SCB & MATTHEWS RS
1974
Planning with regard to the roadside environment
In: Forum on roadsides and conservation. Proceedings of a conference held by VNPA, NRCL, CCV and TCPA.

Victoria
management

Past and present planning of highways in rural areas.

landscape, planning

OS:167

EVERETT RL
1980
Use of containerized shrubs for revegetating arid roadcuts
Reclam. Rev. 3(1), 33-40

USA
scientific

Container stock of 13 shrub species was evaluated for summer survival following spring planting in 1976, 1977 and 1978.

rehabilitation

OS:168

FAVRETTO L, MARLETTA GP & FAVRETTO LG
1986
Surface lead pollution of roadside crops in relation to the distance from an emitting line source
J. Sci. Food Agric. 37(5), 481-486

Italy
scientific

The validity of a 3 parameter exponential function was tested by fitting it to a few sets of observations on unwashed wine grape and leaf samples.

lead, pollution

OS:169

FEARNSIDE PM & DE LIMA FERREIRA G
1984
Roads in Rondonia: highway construction and the farce of unprotected reserves in Brazil's Amazonian forest.
Environ. Conserv. 11(4), 358-360

Brazil
general, management

Reordering of priorities is needed in the Brazilian government's planning of development. Greater consideration needs to be given to conservation of vegetation.

conservation

OS:170

FECENKO J, HRONEC O & LONCKOVA O
1984
Effect of air pollution on lead accumulation in plants
Pol' Nohospodarstvo 30(1), 20-28

Czechoslovakia
scientific

The health of Taraxacum officinale does not appear to be affected by lead accumulation which is greatest in autumnn and least in spring.

lead, pollution

OS:171

FELDHAMER GA, GATES JE, HARMAN DM, LORANGER AJ & DIXON KR
1986
Effects of interstate highway fencing on white-tailed deer activity
Journal of Wildlife Management 50(3), 497-503

USA
management, scientific

There was no significant relationship between road-kills and highway direction, habitat, topography, or fence placement.

fauna, road-kill

OS:172

FERGUSSON JE, HAYES RW, YONG TS & THIEW SH
1980
Heavy metal pollution by traffic in Christchurch, NZ: lead and cadmium content of dust, soil, and plant samples
NZ J. Sci. 23(3), 293-310

NZ
scientific

not seen

lead, pollution

OS:173

FERRIS CR
1974
Effects of highways on red-tailed hawks and sparrowhawks
M.S. Thesis, West Virginia University, West Virginia. 60 pp.

USA
scientific

Distribution and abundance of hawks along highway was censused at different seasons. Increased use of highway attributed to availability of prey and availability of perch sites.

birds, fauna

OS:174

FERRIS CR
1979
Effects of Interstate 95 on breeding birds in northern Maine
Journal of Wildlife Management 43, 421-427

USA
scientific

Influence of highway trade-off between loss of forest birds from roadsides and repopulation of this area with species more suited to it. Verge and median strip of 4-lane highway had half the breeding birds as an equal amount of forest.

birds, fauna

OS:175

FLANAGAN JT, WADE KJ, CURRIE A & CURTIS DJ
1980
Deposition of lead and zinc from traffic pollution on two roadside shrubs
Environmental Pollution 1, 71-78

UK
scientific

Large amounts of lead and zinc accumulated on leaf surfaces and bramble leaves collected much more than rhododendron. Zinc was deposited on leaves and twigs in similar quantities to lead.

lead, pollution

OS:176

FLETCHALL OH & GEBHARDT MR
1972
1971 annual report on vegetation control on roadsides and similar areas
Contract no. 69-2, Missouri University, Columbia, Missouri. 100 pp.

USA
management

Discusses herbicidal weed control, spray drift and soil sterilants.

herbicide, weed control

WA:177

FLETCHER D
1988
Plant and ant establishment on Pilbara borrow pits
Thesis. Biology Department, Curtin University

WA
scientific

Examines the pits within 28 months after abandonment and makes an assessment of the rehabilitation techniques involved.

invertebrate, rehabilitation

AU:178

FLETCHER D
1986
Roadside management in the Shire of Ripon
Unpublished B. Appl. Sci. thesis, Department of Applied Biology, Ballarat College of Advanced Education, Victoria

Victoria
management, scientific

Roadside management recommendations for fire prevention and native flora conservation in the Shire of Ripon, including Basalt Plains flora and Themeda australis grassland.

bees,fire,grazing,native flora,rehabilitation,weed control

OS:179

FLUECKIGER W, OERTLI JJ, FLUECKIGER-KELLER H & BRAUN S
1979
Premature senescence in plants along a motorway
Environmental Pollution 20, 171-176.

Switzerland
scientific

Experimental study of effects of vehicle exhaust gases on potted shrubs and trees near motorway. All had premature leaf abscission.

pollution, vehicle exhaust

OS:180

FLUECKIGER-KELLER H, FLUECKIGER W & OERTLI JJ
1979
Changed pH- values on the vegetation along a motorway
Water Air Soil Pollution 11(2), 153-157

Switzerland
scientific

Leaf surfaces and cell sap in clonal birch trees and privet were investigated. Emissions lowered the pH on the leaf surfaces and increased pH of leaf homogenates.

vehicle exhaust

OS:181

FOOTE LE, HIMMELMAN BF & KILL DL
1966
Vegetation and erosion control
Minnesota Department of Highways, Investigation 614, Interim Report. 39 pp.

USA
management

not seen

soil erosion

OS:182

FORBES JO
1964
Problems of highway weed control
Proceedings of 1st Western Canadian Roadside Development Conference, Banff School of Fine Arts. pp 45-50

Canada
management

One of 15 papers presented at the conference. The emphasis is on roadside maintenance as an adjunct and support to road maintenance.

herbicide, road safety, weed control

OS:183

FORMAN RTT & BAUDRY J
1984
Hedgerows and hedgerow networks in landscape ecology
Environmental Management 8(6), 495-510

USA
management

Hedgerows perform diverse functions that are both ecologically and economically significant.

corridor, fauna, hedgerow, shelterbelt, soil erosion

AU:184

FORSTNER P
1983
Methods of establishing vegetation and towards a more effective roadside maintenance programme
Notes prepared for the Local Government Engineers Association of Victoria, Superintendents of Works Conference 1983. 8 pp.

Victoria
management

Factors controlling tree growth; problems with establishing plants on roadsides; soil stabilisation; common problems with roadside vegetation maintenance.

herbicide, planting

OS:185

FOSTER AC & MAUN MA
1978
Concentration of highway deicing agents along roadsides near London
Can. J. Bot. 56(8), 1081-1085

UK
scientific

Concentrations of Na and Cl were higher near the road and decreased with increasing distance from the pavement. The level of calcium in soil did not change with distance.

salinity

OS:186

FOSTER RE JR
1984
Allelopathy and its potential applications in right-of-way management
Transportation Research Record 969, 27-31

USA
general, management

Allelopathy is proposed as alternative to herbicides. It involves the harmful effect by one plant on another through production of chemical compounds.

biological control, herbicide

OS:187

FOWLES GWA
1976
Lead content of roadside fruit and berries
Food Chem. 1(1), 33-39

UK
scientific

Pb content is directly related to proximity to roads, traffic density and the time of exposure. Thorough washing with water removed 40-60% of the Pb from heavily contaminated fruit and berries.

lead, pollution

WA:188

FOX JED
1985
Mulga Study National Highway Project Report No. 7
The Fortescue Valley
Main Roads Department, WA

Western Australia
management

Describes vegetation and soil moisture characteristics at several areas within the Fortescue Valley, and comments on management implications.

native flora

WA:189

FOX JED
1985
Mulga Study National Highway Report No. 8
Chichester Section
Main Roads Department, WA. 53 pp.

Western Australia
management

Chichester section of proposed National Highway between Newman and Port Hedland examined to provide a vegetation map.

native flora

WA:190

FOX JED
1983
Mulga Study National Highway Project Report No. 1.
Main Roads Department, WA. 25 pp.

Western Australia
manangement

Summarises findings relevant to road design & construction, road management, fire and grazing, in relation to the ecology of mulga communities in the Pilbara in the Munjina section of the National Highway.

native flora

WA:191

FOX JED
1983
Mulga Study National Highway Project Report No. 4
Response of Pilbara species to fire
Main Roads Department, WA. 57 pp.

Western Australia
management

Summary of the habitat occurrence and response to fire of some of the more important Pilbara plant species, to form the basis of a fire management programme in the corridor of the National Highway.

fire, native flora

WA:192

FOX JED
1983
Mulga Study National Highway Project Report No. 3
Main Roads Department, WA. 10 pp.

Western Australia
management

Addendum to reports 1 and 2.

native flora

WA:193

FOX JED & CAREY J
1985
Mulga Study National Highway Report No. 6
Robinson section
Main Roads Department, WA. 52 pp.

Western Australia
management

Describes the vegetation of the Robinson section of the proposed highway and discusses drainage management options. Western end has considerable conservation value and requires special treatment.

native flora

WA:194

FOX JED & DUNLOP JN
1983
Mulga Study National Highway Project Report No. 5
Newman to Wanna Munna
Main Roads Department, WA. 57 pp.

Western Australia
management

Describes seven areas of significant mulga stands in the Newman to Wanna Munna section of the proposed highway, and discusses drainage management options where relevant.

native flora

WA:195

FOX JED & DUNLOP JN
1983
Mulga Study National Highway Project Report No. 2
Main Roads Department, WA. 94 pp.

Western Australia
management

Deals with soil moisture and drainage as these may affect road location along the proposed National Highway route between the Packsaddle and Munjina Gorge areas.

native flora

WA:196

FOX JED & MENEY KA
1984
Mitchell Freeway extension hydroseeding on the road verges
Mulga Research Centre Report 7, 53-60.

Western Australia
management

The study of the technique of direct seeding which involves spreading of seed on a mulch medium found the bluemetal mulch effective. The timing of revegetation and the species mix were also important factors.

seeding, rehabilitation

OS:197

FREE JB, GENNARD D, STEVENSON JH & WILLIAMS IH
1975
Beneficial insects present on a motorway verge
Biological Conservation 8(1), 61-72

UK
scientific

Many insects beneficial as crop pollinators or predators of pests present on M1 grass verge, few harmful to crops. Recommends planting species to encourage such insects and also honeybees.

bees, fauna, invertebrate, planting

OS:198

FREEBORG RP, MORRE JD & DANIEL WH
1985
Roadside vegetation management
In: Proceedings of the 5th International Turfgrass Research Conference, Purdue University, West Lafayette, Indiana.

USA
management

Discusses trials testing growth regulators to suppress roadside vegetation dominated by Festuca arundinacea, in Indiana.

herbicide

AU:199

FRIEND GR
1979
The response of small mammals to clearing and burning of eucalypt forest in south-eastern Australia
Australian Wildlife Research 6, 151-163

Victoria
scientific

Corridors left in intensively logged areas may retain a nucleus of breeding animals which can later recolonise the area if their habitat regenerates.

clearing, corridor, fauna, fire, small mammal

OS:200

GALLUP RM
1974
Roadside slope revegetation. Past and current practice on the National Forests.
USDA Forest Service, Equipment Development Center, Report No. 7700-8. 37 pp.

USA
management

Covers past and present literature on revegetation of slopes to protect from erosion. Suggests possible improvements in techniques.

rehabilitation, seeding, soil erosion

OS:201

GANGSTAD EO (ED.)
1982
Weed control methods for rights-of way management
CRC press Inc. Boca Raton, Florida

USA
management, scientific

Details of control methods (herbicides in combination with mechanical, cultural & biological methods) and related data. Includes a glossary of bioagronomic terms.

herbicide, weed control

OS:202

GARDNER RB
1979
Some environmental and economic effects of alternative forest road designs
Trans. Am. Soc. Agric. Eng. 22(1), 63-68

USA
management, scientific

Compared with 3 other road standards, the single-lane road had the least impact on esthetic degradation and erosion.

clearing, construction, soil erosion

OS:203

GARLAND T & BRADLEY WG
1984
Effects of a highway on Mojave Desert rodent populations
Am. Midl. Nat. 111(1), 47-56

USA
scientific

No road mortality was noted on the study area and there was no relationship between proximity to the highway and home range size or trap-revealed life span.

road-kill, small mammal

AU:204

GARNER SA
1977
Roadsides study
Conservation Council of Victoria, Melbourne, Victoria.
7 pp.

Victoria
general, management

Survey of roadsides within a 50-mile radius of Melbourne, classifying them for conservation value on the basis of native flora, history, landscape, recreation value and so on

assessment, conservation, history, landscape, native flora

OS:205

GETZ L, VERNER L & PRATHER M
1977
Lead concentrations in small mammals living near highways
Environmental Pollution 13(2), 151-157

USA
scientific

Lead concentrations were higher in small mammals living 5-10 m from interstate highways than those near less used roads. Concentrations well below toxic, and dispersal from nearby populations would make up any losses, so no major impact.

fauna, lead, pollution, small mammal

OS:206

GETZ LL, COLE FR & GATES DL
1978
Interstate roadsides as dispersal routes for Microtus pennsylvanicus
Journal of Mammalogy 59, 208-212

USA
scientific

Microtus has extended its range through high intensity agricultural regions after continuous dense vegetation developed along interstates. Extensive mowing regime may prevent suitable habitat developing.

corridor, fauna, mowing, small mammal

OS:207

GOLDSMITH CD & SCANLON PF
1977
Lead levels in small mammals and selected invertebrates associated with highways of different traffic densities
Bulletin of Environmental Contamination and Toxicolgy 17, 311-316

USA
scientific

Lead levels studied in areas of different traffic densities and distances from highways. Levels low in insects, high in earthworms and mammals closest to highways and in areas with greatest traffic volume.

fauna, invertebrate, lead, pollution, small mammal

OS:208

GOLDSMITH CD, SCANLON PF & PIRIE WR
1976
Lead concentrations in soil and vegetation associated with highways of different traffic densities
Bulletin of Environmental Contamination and Toxicology 16(1), 66-70

USA
scientific

Soil and vegetative lead levels decreased significantly with distance from highway, and were higher in areas of high traffic volume.

lead, pollution

AU:209

GOOD RB & NEBAUER NR
1977
Erosion control integrates with highway landscape
Journal of the Soil Conservation Service of NSW 32(4), 187-194

New South Wales
management

Short general article recommending integration of highway design, landscaping and erosion control measures.

landscape, planting, soil erosion

AU:210

GOODE DW
1977
Landscape classification and road reserves
Victoria's Resources 19(2), 7

Victoria
general

Discussion of the National Trust of Australia (Victoria)'s landscape programme; techniques of classifying landscapes including roadsides.

assessment, landscape

AU:211

GOODE DW
1974
Environmental planning - highways
In: Forum on roadsides and conservation. Proceedings of a conference held by VNPA, NRCL, CCV and TCPA.

Australia
management

Multi-disciplinary approach needed in highway construction. Environmental planning should be involved from the earliest stages.

landscape, planning

AU:212

GRAHAM B
1980
Conservation of roadsides in South Australia
In: Roadsides of today and tomorrow. Proceedings of a conference held in Melbourne, Victoria. Roadsides Conservation Committee.

South Australia
management

Outlines role and objectives of the South Australia Roadside Vegetation Committee and reviews progress made in meeting objectives, before 1970 and from 1970-1980.

conservation, legislation

AU:213

GRAY HL
1974
Roadside management
In: Forum on roadsides and conservation. Proceedings of a conference held by VNPA, NRCL, CCV and TCPA.

Victoria
management

Roadside management should aim at establishing and maintaining conditions which favour a vegetation cover in harmony with the function of the road itself.

conservation, landscape

OS:214

GREEN JT, WOODRUFF JM & BLASER RE
1973
Stabilizing disturbed areas during highway construction for pollution control
Virginia Polytechnic Institute & State University
Blacksburg, Virginia. 68 pp.

USA
management

An interpretative summary of findings with recommendations for implementation for establishing vegetation or controlling erosion at any season of the year for highway construction sites.

fertiliser, seeding, soil erosion

OS:215

GRELLER AM
1974
Vegetation of roadcut slopes in the tundra of Rocky Mountain National Park, Colorado
Biological Conservation 6, 84-93

USA
scientific

Revegetation of road margins on cut slopes in a tundra area was very slow, only half the cover of undisturbed tundra after 50 years. Most species pioneers. Artificial stabilisation, reseeding and adding topsoil may be necessary.

construction, rehabilitation

AU:216

GRIEVES C & LLOYD D
1984
Conservation of roadsides and roadside vegetation
Arthur Rylah Institute for Environmental Research
Technical Report Series No. 11. Department of Conservation, Forests and Lands, Victoria

Victoria
management

Discusses the ecological, social and economic values of roadside vegetation. Presents a non-specialist procedure for assessing conservation value. Discusses principles of roadside management and presents management guidelines.

assessment,fire,legislation,rehabilitation,soil erosion

OS:217

GUGGENHEIM R, FLUECKIGER W, FLUECKIGER-KELLER H & OERTLI JJ
1980
Pollution of leaf surfaces in the vicinity of a motorway
Umwelt Bundes Amt, Berichte 79(5), 462-468

Switzerland
scientific

Dust interferes with stomatal action. May cause increased water stress as well as reduced growth of plants in hot, dry periods.

pollution

AU:218

GULLAN PK
1980
Sites of environmental significance (botanical)
Upper Yarra Valley and Dandenong Ranges Authority

Victoria
scientific

Includes roadsides as sites of botanical significance.

native flora

OS:219

GUNDERMANN HE
1981
The impact of forest-road construction in high mountains on forest recreation and landscape scenery
Forstwiss. Centrlbl. 100(2), 65-75

Germany
management

Recreation encompasses factors affecting the use of forest roads, esthetic-emotional effects, and socio-hygienical effects. Landscape scenery, as a category, deals with aspect and orientation effects.

assessment, landscape

OS:220

GUNTER G
1975
Observational evidence that shortwave radiation gives orientation to various insects moving across hard-surface roads
Am. Nat. 109(965), 104-107

USA
scientific

Suggests reasons why Estigmene acrea, a sp of Staphylinidae, Pasimachus and Rhopalocera are reported as crossing hard surfaced roads in a straight line.

invertebrate

OS:221

GUNTNER M & WILKE B-M
1983
Effects of deicing salt on soil enzyme activity
Water Air Soil Pollution 20(2), 211-220

Germany
scientific

Reduction of enzyme activity (higher in moder soil than in mull soil) appeared to be due to decreases of microbial activity and not to inactivation of enzymes.

salinity

AU:222

GUTTERIDGE, HASKINS & DAVEY PTY LTD
1981
Scenic highway landscape guidelines: the Hume Highway
Gutteridge, Haskins & Davey Pty Ltd, Division of Urban and Environmental Planning. Prepared for the Garden State Committee

Victoria
management

Gives specific landscape guidelines to improve, maintain and enhance the visual corridor of the Hume Highway.

planning

WA:223

HALSE SA, MORRIS KD, NICHOLS OG & RICE GE
1985
Vertebrate fauna along the Marchagee track, Western Australia
The Western Australian Naturalist 16(4), 57-69

WA
scientific

Survey in 1978-79 recorded 7 native mammal, 88 bird, 4 amphibian and 12 reptile species. The list was compared with that of two nearby sites: Cockleshell Gully and Marchagee Nature Reserve.

fauna

OS:224

HARAKAL O'NEILL D, ROBEL RJ & DAYTON AD
1983
Lead contamination near Kansas highways: implications for wildlife enhancement programs
Wildl. Soc. Bulletin 11(2), 152-160

USA
scientific

Lead concentrations were positively correlated with traffic volume and negatively correlated with distance from highways

invertebrate, lead, pollution, small mammal

OS:225

HARDING BD
1986
Short-eared owl mortality on roads
Br. Birds 79(8), 403-404

UK
scientific

not seen

birds, road-kill

OS:226

HARGETT DL, PHILLIPS JA & KLEISS HJ
1982
Soil variability & fertility considerations affecting establishment of erosion control vegetation on Piedmont roadcuts
J. Soil Water Conserv. 37(4), 229-233

USA
scientific

Roadside cutslope soils derived from 4 distinctively different geological materials were evaluated for physical and chemical properties important to turf establishment for erosion control.

soil erosion

OS:227

HARRIS JL, BURNSIDE FL, RICHARDSON BL & WELCH WK
1984
Methods for analysis of highway construction impacts on a wetland ecosystem: a multidisciplinary approach
Transportation Research Record 969, 8-17

USA
management

Coordination with the Environmental Protection Agency, the Fish and Wildlife Service, & the US Army Corps of Engineers resulted in the Highway Dept agreeing to monitor impacts before, during, & after construction of US-62 in Arkansas.

assessment, wetlands

AU:228

HARRIS JS
1964
Roadside erosion control in Goodradigbee Shire
Soil Conservation Journal of NSW 20, 39-47

New South Wales
management

Prevention and control of roadside erosion by runoff water involves treating catchment area above roadside, roadside itself and land below. Also requires cooperation between landholders and road authorities.

construction, soil erosion

OS:229

HARRIS LD
1985
Conservation corridors: a highway system for wildlife
ENFO Florida Conservation Foundation

USA
general, management

"Thus the issue is not whether wildlife will pass below highway bridges; the issue is whether we choose to build such bridges." A statewide corridor plan must be a blend of incentives, awards & rewards, State leadership & guidance.

conservation, road-kill

OS:230

HARRISON RM, LAXEN DPH & WILSON SJ
1981
Chemical associations of lead, cadmium, copper, and zinc in street dusts and roadside soils
Environ. Sci. Technol. 15(11), 1378-1383

UK
scientific

The chemical associations were investigated by a sequential extraction procedure which yielded five fractions termed exchangeable, carbonate, Fe-Mn oxide, organic, and residual.

lead, pollution

WA:231

HART AJ
1988
Results of revegetating a roadside verge by direct seeding- Wongan Hills/ Calingiri Road, Western Australia
Research into Rural Tree Decline pp 60-61

Western Australia
scientific

Success in re-establishing certain species was mainly due to seed bed preparation which enabled weed growth to be delayed 12-24 months and soil movement to be minimized.

rehabilitation, seeding, soil erosion, weed control

OS:232

HARTNIGK-KUEMMEL C
1982
The moss mites (Acari: Oribatei) of an oak-pine forest soil in Berlin (West): comparison of 3 sampling plots ...
Zool. Beitr. 28, 207-230

Germany
scientific

Compares 3 sampling plots in this biotope which are differently exposed to the influences of lead, cadmium and salt, but resemble each other in the original soil, climate and vegetation.

invertebrate, lead, vehicle exhaust, salinity

AU:233

HASELER WH
1976
Parthenium hysterophorus L. in Australia
PANS 22(4), 515-517

Queensland
scientific

Describes distribution and biology of Parthenium. Has spread rapidly mainly along roadsides in rangeland country. Seed dispersal may be by vehicles; disturbed ground and run-off from road provide suitable site for germination.

weed control

AU:234

HEALEY P
1974
A conceptual note on social and environmental evaluation
In: Forum on roadsides and conservation. Proceedings of a conference held by VNPA,NRCL, CCV and TCPA.

Victoria
management

Discusses road planning evaluation (=technical decision-making process) as related to cultural physical environment, social environment and the natural physical environment.

planning

WA:235

HEATH M
1973
Roadside development and landscape
International Training Course in Road Engineering 5(1), Topic 14. Department of Main Roads, WA. 21 pp.

Western Australia
management

Presents the landscape thinking of the Main Roads Department, WA.

landscape, planting, road safety

AU:236

HEDBERG LE
1977
Roadside erosion control, Burrangong shire - Young-Boorawa road
Journal of the Soil Conservation Service of NSW 33(2), 87-91

New South Wales
management

Road reconstruction techniques to minimise erosion caused by runoff.

construction, soil erosion

AU:237

HEDGES C
1985
Municipal roadside management- what place do herbicides have?
In: Managing roadside vegetation: what part do herbicides play? Paper from a workshop and fieldday at Ballarat College of Advanced Education. Roadsides Conservation Committee. pp 21-22

Victoria
management

Suggests that the spraying programme be taken out of the hands of the local fire brigades and be given to professionals so that there is proper control of application times and rates.

herbicide

OS:238

HEICHEL GH & HANKIN L
1976
Roadside coniferous windbreaks as sinks for vehicular lead emissions
J. Air Pollut. Control Assoc. 26(8), 767-770

USA
scientific

The Pb content of foliage and twigs of various ages adjacent to and far from the road was analysed by atomic absorption spectrophotometry.

lead, pollution, shelterbelt

OS:239

HENDERSON MT, MERRIAM G & WEGNER J
1985
Patchy environments and species survival: chipmunks in an agricultural mosaic
Biological Conservation 31, 95-105

Canada
scientific

Fencerows formed critical connections among chipmunk populations in separate woods, enabling areas of local extinctions to be recolonised.

corridor, fauna, landscape

AU:240

HERITAGE COUNCIL OF NSW
1981
Street trees and roadside vegetation
Newsheet 3. 10 pp.

New South Wales
management

Provides guidelines to local government authorities for the conservation of existing street trees and roadside vegetation and for the introduction of ornamental plantings especially in historic areas.

landscape

OS:241

HERNANDEZ TJ
1986
The toxicology of herbicides
Transportation Research Circular 307, 12-13

USA
management

Supports the use of herbicides provided these herbicides are safe, and proper precautions are taken in their application on roadsides.

herbicide, weed control

OS:242

HESSING MB & JOHNSON CD
1982
Early secondary succession following restoration and reseeding treatments in northern Arizona
J. Range Manage. 35(5), 667-670

USA
management, scientific

Reseeding was not successful. Restoration either had no significant positive effect on revegetation or slowed plant succession in the following 4 year period.

rehabilitation, seeding, succession

WA:243

HEWETT PN
1980
Road verge flora conservation in Western Australia
In: Roadsides of today and tomorrow. Proceedings of a conference held in Melbourne, Victoria. Roadsides Conservation Committee.

Western Australia
management

Review of progress in implementing recommendations of RVCC report to Government in 1970, 10 years on.

conservation

AU:244

HIBBERD JK (ED)
1978
The future of the long paddock
Nature Conservation Council of NSW

New South Wales
management, scientific

Study of travelling stock reserves, routes and roadside verges in Southern Tablelands of NSW. Many stock reserves contain the only remnants of area's natural vegetation and are valuable conservation reserves and wildlife corridors.

corridor, fauna, landscape, legislation

AU:245

HIGHWAYS AND LOCAL GOVERNMENT DEPARTMENT, SOUTH AUSTRALIA
1969
Borrow pits
Highways and Local Government Department, South Australia

South Australia
general, management

Leaflet pointing out adverse effects of roadside borrow pits

construction, native flora, rehabilitation

AU:246

HIGHWAYS AND LOCAL GOVERNMENT DEPARTMENT, SOUTH AUSTRALIA
1969
The planting of trees on roadsides
Highways and Local Government Department, South Australia

South Australia
general, management

Leaflet covering general guidelines for preparation, planting, and aftercare of trees on roadsides.

planting

WA:247

HOBBS RJ & ATKINS L
1988
Effect of disturbance & nutrient addition on native & introduced annuals in plant commmunities in the WA wheatbelt.
Australian J. of Ecology 13, 171-179

Western Australia
scientific

The growth of native and introduced species is limited by nutrient availability. Introduced species respond more to a combination of nutrient addition and soil disturbance.

fertiliser, native flora, weed

OS:248

HODDER RL
1970
Roadside dry-land planting research in Montana
Highway Research Record 335, 29-34

USA
management

Investigates growing seedlings in very long narrow tubes instead of pots: advantages of reduced space and soil needs and easier transport. Another approach to dry-land planting uses plastic-lined planting basins to reduce evaporation.

planting

OS:249

HOFSTRA G & SMITH DW
1984
The effects of road deicing salt on the levels of ions in roadside soils in southern Ontario
Journal of Environmental Management 19(3), 261-271

Canada
scientific

Mineral soil, litter and live vegetation along a four-lane highway were analysed for Na, Cl, K, Ca and Mg.

salinity

AU:250

HOLMAN DJ
1981
Parthenium weed threatens Bowen Shire
Queensland Agricultural Journal 107, 57-60

Queensland
management

Roadsides and other disturbed areas are parthenium seed sources. Gives guidelines for keeping weed out of pastures, and how to control once established, by grazing and burning in pastures and by chemical control on roadsides.

weed control

OS:251

HOOPER MD
1970
Disappearing hedgerows in the United Kingdom: the effect on conservation
Biological Conservation 2, 230-231

UK
scientific

Disappearance of hedgerow habitat becomes more serious as increased intensification of agriculture causes areas of natural vegetation to become more and more isolated.

corridor, fauna, hedgerow

OS:252

HOPE JONES P
1980
Bird scavengers on Orkney roads
Br. Birds 73(12), 561-568

UK
scientific

An almost invariable dominance hierarchy was apparent: great black-backed gull L. marinus adult> immature> lesser black-backed gull L.fuscus> raven> carrion crow (> common gull).

birds, road-kill

WA:253

HOPPER SD & MUIR BG
1984
Conservation of the kwongan
In: Pate JS & Beard JS (Eds) Kwongan: Plant Life of the Sandplain. University of Western Australia Press, Nedlands, WA. pp 253-266

Western Australia
management, scientific

Discusses kwongan vegetation, threats to it and approaches to conservation. Roadsides are vital in the reserve network. Need for further research on kwongan biology and on survey and management techniques for roadside flora conservation.

conservation, legislation, native flora

OS:254

HORAK O, REBLER R & SCHMIDT J
1976
Lead residues in plants and soils among Austrian motor roads
Bodenkultur 27(4), 376-384

Austria
scientific

The contamination of plants with airborne Pb residues from motor car exhausts depends not only on the density of traffic and the distance from the road, but also on the season.

lead, pollution

WA:255

HOSIE DJ, BOGOIAS A, DE LAETER JR & ROSMAN KJR
1978
The cadmium content in soil at Heirisson Island, Western Australia
Search 9(1-2), 47-49

Western Australia
scientific

Cadmium enters roadside environment mainly through wear of tyre rubber. Contamination at this site considerably lower than expected from overseas studies, however should still ensure vegetables for human consumption not grown there.

pollution

OS:256

HOTTENSTEIN WL
1970
Erosion control, safety and aesthetics on the roadside. Summary of current practices
Public Roads 36, 29-43

USA
management

Summarises current practices used to establish grasses, encourage natural regeneration and manage roadside turf. Reviews turf uses and design elements of cross section, grade and earth stabilisation.

rehabilitation, soil erosion

OS:257

HOVLAND D, WESLEY DE & THOMAS J
1966
Establishing vegetative cover to protect roadside soils in South Dakota
Agricultural Experiment Station, South Dakota.
Bulletin 527. 31 pp.

USA
scientific

Gives details of experiments in planting grass and legume species in roadside soils. Shows the need for nitrogen and phosphorus fertilisation and simple soil management, like loosening.

fertiliser, planting

OS:258

HSU MT
1984
Roadside deicing chemical accumulation after 10 years
Transportation Research Record 969, 36-40

USA
scientific

The chloride ions leached out of the soil fairly rapidly and had no pronounced accumulative effect. The pH of the soil appeared to have a direct relationship with the sodium content of the soil.

salinity

OS:259

HSU MT
1986
Pilot study of small-scale monitoring methods of herbicide residues in soil and water
In: Roadside design and management,
Transportation Research Record 1075, 44-48

USA
management, scientific

It is feasible to develop a low-budget monitoring program from local resources, the cost of which could be included in ongoing roadside spray operations.

herbicide

OS:260

HUFFINE WW & CARGILL LM
1982
Implementation of roadside erosion control research results
Agricultural Experiment Station, Division of Agriculture, Oklahoma Project No.76-04-3. Final report, MP-111.

USA
management, scientific

Research into control of Johnson grass, willow grass, bind-weed. broadleaf weed, sandbur; seeding Plains bluestem and planting ground covers other than grass. Promotes use of herbicide over mowing.

herbicide, mowing, soil erosion, weed control

OS:261

HUFFINE WW, REED LW & WHITCOMB CE
1982
Selection, establishment and maintenance of roadside vegetation
Agricultural Experiment Station, Division of Agriculture, Oklahoma Project No. 77-05-3. Final report, MP-110. 66 pp.

USA
management, scientific

Research designed to reduce maintenance activities to a minimum, and to enhance the economics, efficiency and effectiveness of the practices that must be performed. Involved monitoring seed mixtures over 3 years.

herbicide, seeding, soil erosion, weed control

OS:262

HUFFINE WW, REED LW, GRAY F & CARGILL LM
1978
Cultural practices for the establishment of grasses from seed for roadside erosion control
Transportation Research Record 674, 40-42

USA
management

Trials compare seeding methods, mulches and tillage treatments on weeping lovegrass and Asiatic bluestem grasses

seeding, soil erosion

OS:263

HUFFINE WW, REED LW, ROACH GW, SCHNEIDER RJ, BHROMMALEE N & SINKLER MD
1970
Weed control on Oklahoma highways
Highway Research Record 335, 45-51

USA
management

Roadside weed control in Oklahoma concerned with both selective and nonselective herbicides for control of broad-leaved weeds and undesirable grasses. Programme aims to evaluate most effective and economical use of herbicides.

herbicide, weed control

OS:264

HUNGERFORD RD
1984
Native shrubs: suitability for revegetating road cuts in northwestern Montana
Res. Pap. Intermt. For. Range Exp. Stn. INT-331. 13 pp.

USA
management, scientific

Species suitability is rated and important attributes are given for the species that rated the highest.

native flora, planting, rehabilitation

WA:265

HUSSEY P
1987
On the verge
Landscope 2(4), 40-43

Western Australia
general

The text, supplemented with photographs, encourages awareness of the need to conserve roadside vegetation. Points out the role of the RVCC in achieving this end.

conservation, corridor, fire, weed control

WA:266

HUSSEY P & LONEY B
1987
The Wubin-Mullewa conservation corridor
Western Roads 12(3), 7-11

Western Australia
management

Describes the efforts to create a road reserve of a minimum 40 metres in the WA wheatbelt area. The roadside vegetation will connect large nodes of remnant vegetation and nature reserves along the way.

clearing, conservation, corridor

AU:267

HUTCHINSON, C
1977
Some historical and legal aspects of roads.
Victoria's Resources 19(2), 2-4

Victoria
general, management

Brief history of roads and road administration. Lists authorities responsible for management of Victoria's roadside environments.

history, legislation

AU:268

INTERDEPARTMENTAL COMMITTEE ON VEGETATION CLEARANCE
1976
Vegetation clearance in South Australia
Report of the Interdepartmental Committee on Vegetation Clearance. 57 pp.

South Australia
management

Looks to the effective long term control of vegetation clearance. The importance of roadside vegetation is acknowledged and suggestions are made regarding the future of the Roadside Vegetation Committee.

clearing, conservation, history, legislation

OS:269

IRWIN LL, MASON ML & WARD AL
1981
Lead compounds in mule deer and vegetation along I-80, southeastern Wyoming
Transportation Research Record 805, 3-5

USA
scientific

Deer near I-80 contained higher lead levels than a control group. Lead accumulated in bones, kidney and liver.

fauna, lead, pollution

OS:270

ISABELLE PS, FOOKS LJ, KEDDY PA & WILSON SD
1987
Effects of roadside snowmelt on wetland vegetation: an experimental study
Journal of Environmental Management 25(1), 57-60

Canada
scientific

Community biomass, species diversity, evenness and richness all decreased significantly with increasing snowmelt concentration.

salinity, wetlands

OS:271

ISRAELSEN CE, CLYDE CG, FLETCHER JE, ISRAELSEN EK, PACKER PE & FARMER EE
1980
Erosion control during highway construction: manual on principles and practices
National Cooperative Highway Research Program Report 221. 21 pp. plus appendices.

USA
management

Focuses on techniques for predicting the erosion potential of highway construction sites, and for estimating the effectiveness of erosion control measures.

soil erosion

OS:272

ISRAELSEN CE, CLYDE CG, FLETCHER JE, ISRAELSEN EK, PACKER PE & FARMER EE
1980
Erosion control during highway construction
National Cooperative Highway Research Program Report 220. 30 pp.

USA
management

Findings of questionnaire returns from 177 sources and visits to construction projects in 32 States.

soil erosion

OS:273

IVENS GW & CLARE KE
1962
The potentialities of chemicals for the control of vegetation on roadsides in tropical countries
Department of Scientific & Industrial Research, England. Road Research Laboratory.
Road Research Overseas Bulletin 16. 26 pp.

UK
management

Deals with situations needing vegetation control, uses of chemicals and methods of application, and the economic aspects of the experience in UK and USA.

herbicide, weed, weed control

OS:274

JAHN LR
1974
Highway design and wildlife
Paper presented at the Interagency Seminar sponsored by the American Association of State Highways and Transportation Officials.

USA
management

Identifies problems associated with highways and wildlife, and suggests ways of minimising conflicts between them. Need increased communication between the two interests, especially in earliest planning stages of highway projects.

fauna, mowing, road-kill

OS:275

JELLICOE GA
1958
Motorways: their landscaping, design and appearance
Town Planning Institute, London. 27 pp.

UK
management

Draws from history and current practice in order to establish standards for future road design.

history, landscape, road safety

OS:276

JOHNSON AG & WHITE DB
1965
Development of ground cover for highway slopes
University of Minnesota, Investigation 615, Interim report. 87 pp.

USA
management

not seen

planting, soil erosion

OS:277

JOHNSON AG, SMITHBERG MH & WHITE DB
1965
Ground covers for highway slopes: an annotated bibliography
University of Minnesota Investigation 615. 104 pp.

USA
scientific, management

not seen

bibliography

OS:278

JOHNSON HB, VASEK FC & YONKERS T
1975
Productivity, diversity and stability relationships in Mojave Desert roadside vegetation
Bulletin of the Torrey Botanical Club 102, 106-115

USA
scientific

not seen

native flora

OS:279

JOHNSON WD
1980
Roadside vegetation management in North Carolina
Public Works 111(11), 67-69

USA
management

Describes North Carolina's herbicide and growth regulator programme for the control of roadside vegetation and to reduce hand labor and machine operations.

herbicide, weed control

OS:280

JOHNSON WD
1985
Chemically controlling roadside vegetation
Public Works 116(3), 64-65

USA
management

Discusses aspects of North Carolina's herbicide-growth regulator program for roadside vegetation management.

herbicide, weed control

OS:281

JOSELYN GB
1969
Wildlife. Essential consideration determining future highway roadside maintenance policy
Highway Research Record 280, 1-14

USA
management

Discusses roadside vegetation management and implications for ground-nesting birds and small mammals in the Midwest. Growing trend towards minimum mowing creates more nesting cover and habitat.

birds, fauna, mowing, small mammal

OS:282

JUFFER HD, COWARD KL & FOOTE LE
1983
Innovative technique for preliminary highway location
In: Wetlands, floodplains, erosion, and storm water pumping, Transportation Research Record 948, 1-10

USA
management

This was the first Minnesota DOT scoping document that allowed early elimination of route alternatives and recommended one alternative for detailed study in the environmental process.

assessment, construction

OS:283

KAZIMIR J, CLARKE B & BRENNAN E
1982
Trees indicate decreased lead pollution along New Jersey highways
J. Air Pollut. Control Assoc. 32(9), 957-958

USA
management, scientific

In support of the hypothesis that trees might serve as an effective sink for undesirable pollutants, measurements have been made of the heavy metal content of foliage in eight tree species.

lead, pollution

OS:284

KELCEY JG
1975
Opportunities for wildlife habitats on road verges in a new city
Urban Ecology 1(2-3), 271-284

UK
management

Outlines opportunities for creation of wildlife habitats along verges of roads being constructed in the new town of Milton Keynes, England.

fauna, planting

WA:285

KENEALLY KF
1977
The natural history of the Wongan Hills
The Western Australian Naturalists' Club, Perth, Handbook No. 11.

Western Australia
general, scientific

Gives descriptions of patches of remnant vegetation along roadsides. Includes photographs.

native flora

OS:286

KENTON E (ED.)
1978
Highway beautification: a bibliography with abstracts.
1964-Jan 1978
National Technical Information Service, Springfield, Va.
81 pp.

USA
management, scientific

81 reports cited concerning beautification and landscaping programmes for highways and roads. Includes planting, legislation, seeding, maintenance and amenity.

bibliography, landscape, planting, soil erosion

OS:287

KHANNA SD
1973
Effects of highways on surface and subsurface waters
Public Works 104(11), 71-73, 123-124

USA
management

Identifies detrimental and beneficial effects on waters in vicinity of highway, and suggests general solutions to them.

construction

AU:288

KIRKPATRICK JB
1975
Vegetation change in a suburban coastal reserve
Australian Geographical Studies 13, 137-153

Victoria
scientific

Documents change in vegetation of Sandringham Foreshore reserve, a narrow reserve with developed hinterland. Discusses problems to do with linear shape. Least affected by weeds were waterlogged or salt-spray influenced areas.

salinity, weed

AU:289

KIRKPATRICK JB
1974
Plant invasion and extinction in a suburban coastal reserve
Australian Geographical Studies 12, 107-118

Victoria
scientific

Describes change in floristics in a long linear coastal reserve in Melbourne 1911-1971. Marked replacement of native species by exotics, plus changes in life form composition. Main cause was intensive land use on long reserve boundary.

island biogeography, native flora, weed

WA:290

KITCHENER DJ
1976
Preface to the biological survey of the Western Australian wheatbelt
Records of the Western Australian Museum, Supplement No. 2

Western Australia
scientific

One of the objectives of the survey is to obtain information on fauna movement between reserves: most work likely to be with birds and in particular their use of road verges.

birds, corridor, fauna

WA:291

KITCHENER DJ, DELL J, MUIR BG & PALMER M
1982
Birds in Western Australian wheatbelt reserves - implications for conservation
Biological Conservation 22, 127-163

Western Australia
scientific

Bird species richness in 22 reserves was related not to isolation from uncleared land, but to reserve area and some habitat variables. Roadsides provide dispersal corridors, so may reduce decline in numbers of some species.

birds, corridor, island biogeography

OS:292

KLEIN A
1980
The vegetation on motorway verges in northern Switzerland and its suitability for nature protection purposes
Verhoff. Geobot. Inst. ETH, Stift. Rubel, 72, 1-75

Switzerland
management, scientific

In spite of favorable edaphic conditions, the development of vegetation towards a dry mager grassland is hindered by the present management, in particular by frequent mulching.

mowing, planting, weed

OS:293

KNUTSON R
1987
Flattened fauna: a field guide to common animals of roads, streets, and highways
Ten Speed Press, Berkeley. 92 pp.

USA
management

The book announces the formation of the Simmons Society to gather information and promote understanding about the "road animals" of North America. Suggests the setting up of a death register of road-killed animals.

conservation, road-kill

OS:294

KOPECKY K
1978
Importance of road verges as migration routes of field weeds - an example from the Orlicke hory mountains and foothills
Preslia 50(1), 49- 64

Czechoslovakia
scientific

The most effective biological barrier preventing mass spread of weeds along roads is closed grass communities.

biological control, weed

OS:295

KOPECKY K & HEJNY S
1978
Roadsides as migration routes for field weeds...
Vegetatio 36(1), 43-51

Germany
scientific

In German with an English summary. Uses the Braun-Blanquet phytosociological approach to classifying roadside plant communities.

weed

OS:296

KREUTZER K
1977
Effects of deicing highway salts on roadside forests
Forstwiss. Centralbl. 96(1), 76-83

Germany
management, scientific

A range of salt injuries were found in trees within 400m of the road.

disease, salinity

OS:297

KUHNBERGER R & MAHN EG
1976
Investigations on the influence of Magnesiumchloride-Sole to Puccinellia distans (Jacq.) Parl. and Lollum perenne L.
Arch. Naturschutz Landschaftsforsch 16(1), 71-82

Germany
scientific

The increasing appearance of P. distans observed on roadside verges of the southern GDR in the last years, seems to be influenced by the use of Magnesiumchloride for deicing roads

germination, salinity

AU:298

KUIKEN M
1988
Consideration of environmental and landscape factors in highway planning in valued landscapes: an Australian survey
Journal of Environmental Management 6, 191-201

Australia
management

This survey of State Road Authorities in Australia considered the highway planning process, the forms of environmental consideration, procedures for environmental assessments and governmental legislation.

assessment, landscape, planning

OS:299

LAAKSOVIRTA K, OLKKONEN H & ALAKUIJALA P
1976
Observations on the lead content of lichen bark adjacent to a highway in southern Finland
Environmental Pollution 11(4), 247-255

Finland
scientific

Pine bark was a better indicator than lichens of Pb emission from motor vehicles. This could be caused by effective Pb accumulation in lichens when there was moderate traffic flow

lead, pollution

OS:300

LAGERWERFF JV & SPECHT AW
1970
Contamination of roadside soil and vegetation with cadmium, nickel, lead and zinc
Environmental Science and Technology 4(7), 583-586

USA
scientific

Concentrations of Cd, Ni, Pb and Zn in roadside soil and grass samples from several locations decreased with distance from traffic and with depth in soil profile. Pollutants come from petrol, motor oil and car tyres.

lead, pollution

OS:301

LAITIN J
1987
Corridors for wildlife
American Forests 47-49

USA
scientific

A study of the fauna in corridors left by the International Paper Company (IP) in a 300,000 acre tract of spruce and fir infested with budworm in the NE of the United States.

corridor, fauna

AU:302

LAKEMAN K
1983
Submission to Dundas Shire Council regarding roadside conservation areas in Dundas Shire
Hamilton Field Naturalists Club

Victoria
general, management

not seen

conservation

OS:303

LALO J
1987
The problem of road kill
American Forests 50-52, 72

USA
management

Looks at road-kill and the efforts being made to reduce the carnage.

road-kill

WA:304

LAMONT BB & SOUTHALL KJ
1982
Biology of the mistletoe Amyema preisii on road verges and undisturbed vegetation
Search 13, 87-88

Western Australia
scientific

Mistletoes were more common along a road verge than in the adjacent reserve. May be due to greater host age structure and visitation by bird dispersers rather than greater host height or density or more light on verge.

native flora

AU:305

LAMP C & COLLET F
1984
A field guide to weeds in Australia
Inkala Press

Australia
general, scientific

Identification manual with photographs of every species. Description lists common habitats, including roadsides.

weed

AU:306

LAND CONSERVATION COUNCIL
1986
Melbourne area District 1 review. Proposed recommendations
Land Conservation Council, Victoria

Victoria
management

Sets aside certain roadsides as Roadside Reserves.

native flora

AU:307

LANE D
1977
The significance of noxious weeds on roadsides in agricultural areas of Victoria, Australia
Weed Research 19, 151-156

Victoria
scientific

Survey of noxious weed species on roadsides and adjacent farmland. Roadside weed control should be done only where it is also done on farmland. Good vegetation cover on both roadsides & farmland reduces weeds without need for control.

weed control

AU:308

LANE D
1976
The vegetation of roadsides and adjacent farmland of the Mornington Peninsula, Victoria, Australia
Weed Research 16(6), 385-389

Victoria
scientific

Survey of vegetation on roadsides and adjacent farmland on Mornington Peninsula, Victoria.

clearing, native flora, weed control

AU:309

LANE D
1974
Roadside hygiene - Part 1, weeds
In: Forum on roadsides and conservation. Proceedings of a conference held by VNPA, NRCL, CCV and TCPA.

Victoria
management

Approaches to roadside management to control weeds and maintain suitable vegetation cover.

weed control

AU:310

LANE D
1980
Vegetation patterns on roadsides and adjoining land
In: Roadsides of today and tomorrow. Proceedings of a conference held in Melbourne, Victoria. Roadsides Conservation Committee.

Victoria
management, scientific

Reviews factors influencing vegetation patterns on roadsides including seed dispersal, disturbance from construction, management programmes.

construction, weed, weed control

AU:311

LANE D
1979
The significance of noxious weeds on roadsides in agricultural areas of Victoria, Australia
Weed Res. 19(3), 151-156

Victoria
scientific

Suggests better suppression of weeds should be achieved by maintaining good tree and grass cover.

biological control, weed, weed control

OS:312

LASKEY BC & WAKEFIELD RC
1978
Competitive effects of several grass species and weeds on the establishment of birdsfoot trefoil
Agron. J. 70(1), 146-148

USA
scientific

Birdsfoot trefoil plant counts at the seedling and bloom stages showed that ryegrass was the most and red fescue the least competitive grass.

biological control, planting, weed

OS:313

LAU WM & WONG HM
1982
An ecological survey of lead contents in roadside dusts and soils in Hong Kong
Environ. Res. 28(1), 39-54

Hong Kong
scientific

Examination of edaphic properties of soil samples indicates that the availability of lead and some other metals may be influenced by pH, water-soluble phosphate, and the carbon to nitrogen ratio.

lead, pollution

OS:314

LAURSEN K
1981
Birds on roadside verges and the effect of mowing on frequency and distribution
Biological Conservation 20(1), 59-68

Denmark
scientific

Mowing in summer has no decisive effect on the number of birds or their distribution on road verges.

birds, mowing

AU:315

LAWRANCE N
1985
Factors influencing natural regneration
In: Venning J (Ed.) Revegetation workshop: direct seeding & natural regeneration techniques. Department of Environment and Planning, SA, and Greening Australia, SA. pp 99-101

Victoria
management

Direct seeded corridors such as unused roads and railways provide habitat and shelter, are easy to plant and protect from grazing, and can be combined with soil conservation practices.

railway, seeding, shelterbelt

OS:316

LAWTON RM
1970
Disappearing hedgerows in the United Kindom: the effect on conservation
Biological Conservation 2, 311

UK
scientific

Short letter in response to Hooper (1970) article, suggests abandoned railway tracks should be surveyed and retained as replacement habitats for vanishing hedgerows.

corridor, hedgerow

OS:317

LEEDY DL
1975
Highway-wildlife relationships. Volume 1: A state-of-the-art report
Report No. FHWA-RD-76-4, Federal Highway Administration, Offices of Research and Development

USA
management, scientific

Assesses through an extensive literature review what is known about highway-wildlife relationships and suggests research and management approaches to protect and enhance fish, wildlife and environmental quality. Mainly USA work.

fauna, pollution, soil erosion, weed control

OS:318

LEEDY DL & ADAMS LW
1982
Wildlife considerations in planning and managing highway corridors
Report No. FHWA-TS-82-212, Federal Highway Administration, Offices of Research and Development, Washington DC. 93 pp.

USA
management, scientific

Manual is information source on highway-wildlife effects and relationships; guide to inventorying wildlife populations, assessing environmental impact, evaluating habitat. Suggestions for management & including wildlife values in planning.

assessment, construction, corridor, fauna, rehabilitation

OS:319

LEEDY DL, FRANKLIN TM & HEKIMIAN EC
1975
Highway-wildlife relationships. Volume 2: An annotated bibliography
Report No. FWHA-RD-76-5, Federal Highway Administration, Offices of Research and Development, Washington DC.

USA
management, scientific

794 annotated references, dealing mainly with USA work.

bibliography, fauna, pollution, soil erosion, weed control

AU:320

LEISHMAN M
1986
The distribution of soil phosphorus within urban bushland in the area of Ku-ring-gai, Sydney
Unpublished BSc (Hons) report, School of Biological Sciences Macquarie University

New South Wales
scientific

Measured soil phosphorus levels: sites downslope of nutrient sources (suburban boundaries, stormwater outlets, roads) had greatest phosphorus enhancement. Discusses implications for management of urban bush, especially control of exotics.

pollution, weed control

AU:321

LEITCH GF
1982
Roadsides- everybody's asset, whose responsibility?
Paper presented at the Roadsides Symposium, City of Hamilton

Victoria
general

Details five classes of roads in terms of their managing bodies. However, points out that ownership of all roads resides in the Crown, and hence is the property of the public.

legislation, planning

AU:322

LEITCH GF
1979
Roads and roadside vegetation management problems
Paper presented to: Roadsides and their value to the farmer. Ouyen, 1979

Australia
management

not seen

conservation

OS:323

LEONZIO C & PISANI A
1987
An evaluative model for lead distribution in roadside ecosystems
Chemosphere 16(7), 1387-1394

Italy
scientific

A model that expresses this distribution pattern is proposed to evaluate lead contamination in these ecosystems.

lead, pollution

OS:324

LIEM ASN, HENDRIKS A, KRAAL H & LOENEN M
1985
Effects of deicing salt on roadside grasses and herbs
Plant and Soil 84(3), 299-310

Netherlands
scientific

At a low temperature (5 degrees Centigrade) the plants were not affected by high salt concentrations due to the low physiological activity of the plants.

salinity

OS:325

LINDEN G
1984
The incorporation of environmental considerations in the generation & selection of alternative highway locations
In: Methodology in landscape ecological research & planning, Volume 3, Theme 3: Methodology of data analysis.
Proceedings of the first international seminar of The International Association of Landscape Ecology, Denmark

Netherlands
management

Discusses the techniques of composite computer mapping and route selection in combination with an ecological model as applied in a Dutch case study.

assessment, conservation, construction, planning

OS:326

LITTLEWOOD M
1988
The management of roadside plantings
Aboricultural J. 12(2), 145-162

UK
management

A critical examination of the landscape of 30 miles of motor way and trunk roads in South Wales. Concludes that highway design should include landscape architect, arboriculturist and manager at all stages.

landscape, planning

WA:327

LONEY B
1986
Control of road verge vegetation
Main Roads Department, WA

Western Australia
management

Objectives and methods of vegetation control, and its co-ordination with other maintenance and construction activities.

herbicide, mowing, weed control

WA:328

LONEY B
1986
Revegetation developments on highways and main roads
Main Roads Department, WA

Western Australia
management

Summarises current MRD revegetation trials and methods in natural regeneration, direct seeding and planting, and likely future developments.

planting, rehabilitation, seeding

OS:329

LORD NUGENT OF GUILDFORD
1969
Opening address
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
general

Brief introduction to the symposium.

conservation

AU:330

LOYN RH & MIDDLETON WGD
1981
Eucalypt decline and wildlife in rural areas
In: Old KM et al (Eds). Eucalypt dieback in forests and woodlands. CSIRO, Melbourne. pp 95-111

Victoria
scientific

In the largely cleared Victorian Wimmera an ungrazed timbered road reserve, 2.5km x 70m, contained 85 species of birds including 9 waterbirds. Found up to 1500 individual birds per sq km, comparable to density in continuous forest.

birds, fauna

AU:331

LOYN RH & SUCKLING GC
1987
The value of small reserves for wildlife
Trees and Natural Resources 29(2), 10-11

Victoria
scientific, management

Concludes from a study of mammals and birds in the LaTrobe Valley, that healthy forest patches not be further isolated by allowing other patches and wildlife corridors to be closed.

birds, clearing, conservation, corridor, small mammal

OS:332

LUKE AGR, HARVEY JJ, HUMPHRIES RN
1982
Creation of woody landscapes on roadsides by seeding - a comparison of past approaches in West Germany and the UK
Reclamation and Revegetation Research 1(3), 243-253

UK, West Germany
management

The potential value of the seeding of trees and shrubs as a means of establishing woody vegetation on roadsides is discussed and a comparison is made between the development of the technique in the UK and in West Germany.

seeding

OS:333

LUSSENHOP J
1973
The soil arthropod community of a Chicago expressway margin
Ecology 54(5), 1124-1137

USA
scientific

Soil arthropod community diversity and species distribution along expressway margin were not affected by proximity to city. Expressway population less diverse and had more soil surface- and root-feeders than Wisconsin prairie population.

fauna, invertebrate

OS:334

MACCLINTOCK L, WHITCOMB RF & WHITCOMB BL
1977
Evidence for the value of corridors and minimization of isolation in preservation of biotic diversity
American Birds 31(1), 6-12

USA
management, scientific

Birds are able to breed in forest fragments as small as 35 acres if the fragment is connected by a corridor to a nearby major forest system.

birds, corridor, island biogeography

OS:335

MADER HJ
1984
Animal habitat isolation by roads and agricultural fields
Biological Conservation 29(1), 81-96

West Germany
scientific

Roads and agricultural areas contribute to habitat isolation and roads act as barriers to gene flow by dividing animal populations. Studied mice (Apodemus flavicollis) and carabid beetles.

invertebrate,island biogeography,fauna,genetics,small mammal

WA:336

MAIN ROADS DEPARTMENT, WA
n.d.
Guidelines for the planning, operation and rehabilitation of borrow pits
Main Roads Department, WA. 3 pp.

Western Australia
management

Outlines procedures which cause minimum damage to vegetation and surrounding country during borrow pit construction and maximise rehabilitation afterwards.

construction, rehabilitation

WA:337

MAIN ROADS DEPARTMENT, WA
1986
The importance of conserving roadside vegetation.
Local Government Roadside Vegetation Conservation Regional Seminar, Main Roads Department, WA. 28 pp.

Western Australia
management

Summary of value of roadside vegetation; legislation dealing with flora, road and road verge management; environmental assessment; construction techniques to aid revegetation; weed control; and the use of fire.

assessment, fire, legislation, rehabilitation, weed control

WA:338

MAIN ROADS DEPARTMENT, WA
1983
Interim vegetation control manual
Based on Internal Technical Report No. 83/28, Main Roads Department, WA.

Western Australia
management

Draft manual only. Documents the most suitable practices in herbicidal control of vegetation.

herbicide, weed control

WA:339

MAIN ROADS DEPARTMENT, WA
1984
Perth to Darwin National highway: Newman to White Springs
Supplement to draft Environmental Review & Management Programme and Environmental Impact Statement

Western Australia
management

Takes account of public comment made on Draft ERMP/EIS. The proposed route through Munjina East Gorge seems to be the better option. The appendix contains copies of submissions.

construction, planning

WA:340

MAIN ROADS DEPARTMENT, WA
1984
Guide to low maintenance tree and shrub planting
Main Roads Department, WA. 10 pp.

Western Australia
management

General guidelines for selection of sites and species, and planting and maintenance techniques.

fire, planting, weed control

WA:341

MAIN ROADS DEPARTMENT, WA
1984
Control of road verge burning on highways and main road reserves
Main Roads Department, WA

Western Australia
management

Outlines Main Roads Department policy and practice of road verge burning. Policy is to burn less frequently to reduce spread of exotic summer grasses, reduce soil erosion and preserve conservation corridor.

corridor, fire, legislation, soil erosion, weed control

WA:342

MAIN ROADS DEPARTMENT, WA
1984
Perth to Darwin National Highway: Newman to White Springs
Draft report and recommendations by the EPA
Department of Conservation and Environment, WA

Western Australia
management

EPA report states highway not environmentally acceptable unless 1. MRD adopts env. safeguards and management measures proposed and 2. finance is forthcoming for National Parks Authority for additional management of Hammersley Range NP.

assessment, planning

AU:343

MARLEY JMT
1976
The problem of roadside Johnson grass control
Paper presented at Australia Weeds Conference, Melbourne March 1976

Queensland
management

Johnson grass(Sorghum halepense) serious weed of cultivation establishes on roadsides and other disturbed areas. Control program investigating replacement on roadsides by perennial grass, by seeding & herbicides or by altering mowing regime.

mowing, weed control

AU:344

MATTHEWS R ET AL
1977
Landscaping our roads - an integrated approach
Victoria's Resources 19(2), 8-10

Victoria
general, management

Examples of landscaping to compromise among various objectives. Solutions best achieved by integrating environmental and construction aspects in the initial project planning.

construction, landscape, planning, planting

WA:345

MATTISKE EM & ASSOCIATES
1983
Definition of plant communities on the Westrail system in the south-west of Western Australia
EM Mattiske & Associates

Western Australia
scientific

Defines plant communities along selected main railway lines in south west WA, assesses level of disturbance, especially to trees, and assesses future needs of research and management of native plant communities on railway reserves.

native flora, railway

OS:346

MAURER R
1974
The beetle and spider fauna of meadows affected by traffic pollution
Oecologia (Berlin) 14, 327-351

Germany
scientific

In German. The numbers of species and numbers of individuals of Carabidae were significantly lower at edges of meadows on busy road than quiet road. No difference in Staphylinae; reduction in number of species in Araneae.

invertebrate, fauna, pollution

AU:347

MCARTHUR K
1987
The fuelwood threat to roadside conservation and State forests
Trees and Natural Resources 29(1), 25-26

Victoria
management

Describes legislative measures taken by the Mornington Shire Council to put a stop to the rapid escalation in the attack on roadside trees, whether dead or alive, by unauthorised wood collectors.

conservation, legislation

AU:348

MCARTHUR K
1987
Conserving roadsides- what can be done and what should be done by local government
In: Roadsides conservation "asset or liability?"
Prodeedings of a seminar held in Wodonga by the Wodonga Land Protection Regional Advisory Committee, Roadsides Conserv. Committee & Dept Conserv. For. & Lands (NE Region)

Victoria
management

not seen

conservation, legislation, planning

AU:349

MCARTHUR K
1983
Conservation of our roadside
Memo 52, 58-65

Victoria
management

Explains how existing remnant vegetation on roadsides need not always be affected by the erection of power or telephone lines if adjacent cleared farmland were used instead. Land so used can be legally shared by farmers & govt utilities.

clearing, conservation

AU:350

MCARTHY MM, COOPER M, GREEN R, ROSS J, DANIEL T & SIMPFENDORFER K
1983
Roadsides in the Macedon Ranges
In: Green, Schapper, Bishop & McCarthy (Eds). Design for change. Community renewal after the 1983 bushfires.

Victoria
management

Discusses history of roadsides in the Macedon ranges, the functions and benefits of roadsides, their management, particularly by fire, and replanting after the 1983 fires in Mount Macedon.

fire, history

OS:351

MCCASHION JD & RICE RM
1983
Erosion on logging in northwestern California: how much is avoidable?
J. For. 81(1), 23-25

USA
management, scientific

About 24% of the erosion could have been prevented by conventional engineering methods. The remaining 76% was caused by site conditions and choice of alignment.

construction, soil erosion

OS:352

MCCULLY WG
1986
Roadside maintenance considerations in the Texas wildflower program
Transportation Research Circular 307, 8

USA
management

Describes efforts since 1934 by the Texas State Dept of Highways and Public Transportation to encourage the growth of wildflowers along roadside verges.

mowing, native flora, planting

OS:353

MCCULLY WG & BOWMER WJ
1969
Erosion control on roadsides in Texas
Texas Transportation Institute Research Report 67-8. 29 pp.

USA
management

Field seedings installed since 1960, and complemented by laboratory measurements, showed that grass stands adequate for erosion control can be established in NW Texas without the expensive practice of topsoiling.

soil erosion, seeding

OS:354

MCCULLY WG, BOWMER WJ & STUBBENDIECK JL
1970
Problems in establishing or maintaining vegetation on roadsides
Texas Transportation Institute Research Report 142-1

USA
management, scientific

Experiment with modification of soil restricted by physical or chemical characteristics limiting plant growth.

herbicide, soil erosion

OS:355

MCCULLY WG, MCWILLIAMS EE, KASPAR MJ & GRIGG S
1986
Propagation of wildflowers for roadside use
Texas Transportation Institute Report 902-4. 15 pp.

USA
scientific

Germination parameters of transplants for wildflowers were investigated for a number of species.

germination, native flora

AU:356

MCGREGOR B
1984
Publishing a local planting guide
In: At Ground Level: a workshop of restoring local vegetation. Roadside Conservation Committee/ Department of Conservation, Forests and Lands. La Trobe University, Victoria

Australia
general

How to collect a list of indigenous species suitable for revegetation, and how to publish it.

native flora, rehabilitation

OS:357

MCHARG IL
1971
Design with nature
Doubleday & Co., New York

USA
general, management

not seen

conservation, construction

AU:358

MCINNES RS & GREEN J
n.d.
Roadside verge survey to assess insect defoliation of eucalypt species in south-eastern Australia
unpublished data

New South Wales, Victoria
scientific

Authors (CSIRO Div. of Entomology, Canberra) surveyed state of foliage and populations of leaf-eating insects along 1000 miles of roads in SE Australia. Have several years of results and photographic records, held by authors.

invertebrate, native flora

AU:359

MCKERROW J
1974
Development problems adjacent to road reserves
In: Forum on roadsides and conservation. Proceedings of a conference held by VNPA, NRCL, CCV and TCPA.

Victoria
management

Discusses plantations in residential areas and also developments (eg billboards) along rural roads.

landscape

AU:360

MCLAREN NE
1979
The role of habitat islands in the conservation of birds in the mallee of central Eyre Peninsula
Unpublished M. Environmental Studies thesis, University of Adelaide, Adelaide. 184 pp.

South Australia
scientific

Role of uncleared "islands" of mallee scrub in agricultural land compared with "mainland" conservation park. Discusses land-use planning for conservation, including reserve design and corridors, and ecology of different species.

birds, corridor, fauna, island biogeography

AU:361

MCLEAN AJ
n.d.
Roadside vegetation, accidents and casualties
National Health and Medical Research Council
Road Accident Research Unit, University of Adelaide

South Australia
management

not seen

road safety

AU:362

MCLEAN J
1980
Design standards for roads in scenic and recreational areas
In: Roadsides of today and tomorrow. Proceedings of a conference held in Melbourne, Victoria. Roadsides Conservation Committee.

Victoria
management

Discusses approach to road design for safe traffic operations without compromising scenic and environmental objectives.

landscape, planning, road safety

OS:363

MCQUEEN DR
1973
Vegetation along the North Island main trunk line
Unpublished report? Botany Department, University of Wellington, New Zealand

New Zealand
scientific

Survey of railway cuttings with different types of disturbance. Proposals for revegetation methods for soil stabilisation on embankments.

railway, rehabilitation, seeding, soil erosion, weed control

OS:364

MEININGER CA & SPATT PD
1988
Variations of tardigrade assemblages in dust-impacted arctic mosses
Arct. Alp. Res. 20(1), 24-30

USA
scientific

Roadside moss samples are dominated by species tolerant of high calcium and drier habitats. Tardigrade species dwelling within these mosses are typical of more xeric environments.

pollution

WA:365

MENEY KA & FOX JED
1986
Some preliminary germination tests on species for roadside rehabilitation in the goldfields
Mulga Research Centre Report to the Department of Conservation and Environment. 35 pp.

Western Australia
scientific

Tested 26 species, representing 7 plant families. Several treatments were carried out on each species to compare the relative value of treatments in terms of germination percentage. Results are presented in graph & tabular form.

germination, rehabilitation

OS:366

MERRILL LAM, HAWKSWORTH FG & JOHNSON DW
1985
Evaluation of a roadside survey procedure for dwarf mistletoe on ponderosa pine in Colorado
Plant Dis. 69(7), 572-573

USA
scientific

The roadside survey procedure can be reliable for estimating the proportion of ponderosa pine stands with dwarf mistletoe if the road network provides a representative sample of the stands being surveyed.

assessment, native flora

OS:367

MICHAEL ED
1980
Use of different roadside cover plantings by wildlife
Report NO. WVDOH 56 of the West Virginia Department of Highways and FHWA/WV-80/004 of the Federal Highway Administration. 87 pp.

USA
management

Compared different highway cover crops and use by small mammals, songbirds and game animals. Compared mowed and unmowed treatments. Discusses management implications of findings.

birds, fauna, mowing, small mammal

OS:368

MICHAEL ED
1975
Effects of highways on wildlife
Report No. WVDOH42, West Virginia Department of Highways, Charleston, West Virginia. 89 pp.

USA
management, scientific

Compared wildlife populations year before construction of highway (through State Forest in W. Virginia) began with year opened.Populations of some animals increased and others decreased. No change in density attributable to highway.

construction, fauna

OS:369

MICHAEL ED
1978
Effects of highway construction on game animals
Proc., Annu. Conf. Southeast. Assoc. Fish Widl. Agencies 32, 48-52

USA
scientific

Only the wild turkey exhibited a change in distribution due to highway construction along Appalachian Highway 48 in NW Virginia, 1971-1975.

construction, fauna

OS:370

MICHAEL ED
1986
Use of roadside plantings by songbirds for nesting
In: Roadside design and management,
Transportation Research Record 1075, 19-20

USA
scientific

The bird species that most commonly nested in right-of-way trees were robins (Turdus migratorius) and chipping sparrows (Spizella passerina).

birds

OS:371

MIDDLEBROOKS PB
1986
Georgia DOT vegetation management program
Transportation Research Circular 307, 2-8

USA
management

Since 1974 a spray programme has virtually replaced the mowing of roadside vegetation. The most successful treatment (in terms of seedhead control, injury and general appearance) appears to be a combination of Poast @ and atrazine.

mowing, weed control

AU:372

MIDDLETON WGD
1978
The value of remnant vegetation in rural lands
Land for leisure: Proceedings, Annual Conference, Royal Australian Institute of Parks and Recreation, Burnie, Tasmania

Australia
management, scientific

Uncleared road reserves may provide the only remaining habitat for wildlife in intensively used agricultural regions.

corridor, fauna

AU:373

MIDDLETON WGD
1980
Roadside vegetation, a habitat for wildlife
In: Roadsides of today and tomorrow. Proceedings of a conference held in Melbourne, Victoria. Roadsides Conservation Committee.

Victoria
general, scientific

Observations on roadside vegetation as a habitat for native fauna, especially birds, and also as habitat for introduced pests.

birds, fauna

OS:374

MIERAU GW & FAVARA BE
1975
Lead poisoning in roadside populations of deer mice
Environmental Pollution 8, 55-64

USA, overseas
scientific

Bones of deer mice adjacent to major Colorado highway had 10 times as much lead as those from a control site, also higher levels in liver, kidney and brain. However levels still too low to produce lead poisoning.

fauna, lead, pollution, small mammal

OS:375

MILBERG RP, LAGERWERFF JV, BROWER DL & BIERSDORF GT
1980
Soil lead accumulation alongside a newly constructed roadway
J. Environ. Qual. 9(1), 6-8

USA
scientific

95-98% of lead accumulated between 8 and 25m from the highway. Closely correlated with cumulative leaded fuel-burning traffic.

lead, pollution

AU:376

MILNE P
1984
Bay of Islands Coastal Reserve: revegetation of denuded headlands
In: At Ground Level: a workshop on restoring local vegetation. Roadside Conservation Committee/ Department of Conservation, Forests and Lands. La Trobe University, Victoria

Victoria
management

Describes revegetation strategy to restore areas denuded by heavy vehicle and foot traffic in coastal headlands.

rehabilitation

AU:377

MINISTRY FOR CONSERVATION, VICTORIA (NOW DEPARTMENT OF CONSERVATION, FORESTS AND LANDS)
1983
Report of the Roadside Flora Legislation Committee
Ministry for Conservation, Victoria. 46 pp.

South Australia
management

Review and recommendations of legislation relating to roadside vegetation.

legislation

OS:378

MINISTRY OF TRANSPORTATION AND COMMUNICATIONS, ONTARIO
1976
Field environmental protection concerns for construction staff
Environmental Office, Ministry of Transportation and Communications, Ontario

Canada
management

Booklet summarising environmental design features and construction methods which insure appropriate levels of environmental protection and quality control.

construction, pollution

AU:379

MITCHEL A
1976
Conservation aspects of road design, construction and maintenance - erosion control
Paper presented at the 32nd Conference of Municipal Engineers. Country Roads Board, Melbourne, Victoria.

Victoria
management

not seen

construction, soil erosion

AU:380

MOLLENMANS F
1982
A rapid classification scheme for assessing the conservation significance of roadside vegetation
Department of Environment and Planning, SA

South Australia
management

not seen

assessment, conservation

OS:381

MORRE DJ
1978
Five-year evaluation of highway mowing practices in Indiana
Transportation Research Record 674, 47-53

USA
management

Discusses different roadside mowing techniques, particularly timing of mowing in relation to vegetation height.

mowing

OS:382

MORRE DJ & WERDERITSH AD
1972
Chemical weed control
Purdue and Indiana State Highway Commission JHRP. 102 pp.

USA
management

Evaluates herbicides and herbicide combinations for roadside weed control, principally using tordon - 2,4-D combinations. Findings suggest possibility of 3-year spraying rotation combined with one-cycle mowing for roadside maintenance.

herbicide, mowing, weed control

OS:383

MOSLEY MP
1982
The impact of forest road erosion in the Dart Valley, Nelson
NZ J. For. 25(2), 184-198

NZ
scientific

Total rates of erosion on the road system were three times greater but much sediment is fed on to vegetated slopes beneath the roads and is stored there.

soil erosion

OS:384

MOTTO HL
1970
Lead in soil and plants: its relationship to traffic volume and proximity to highways
Environmental Science and Technology 4(3), 231-237

USA
scientific

Lead content of soils and plants increased with traffic volume and decreased with distance from highway. Much was surface contamination only.Experiments suggest plants obtain lead through both leaves and roots but little translocated.

lead, pollution

OS:385

MUHLENBACH V
1969
Along the railroad tracks, a study of adventive plants
Bulletin of the Missouri Botanical Garden 57, 10-18

USA
scientific

not seen

railway, weed

WA:386

MUIR BG
1977
Biological survey of the Western Australian wheatbelt
Part 2: Vegetation and habitat of Bendering Reserve
Records of the Western Australian Museum, Supplement No. 3
pp 42-44

Western Australia
scientific

These pages list observations on the effect of fertilisers leached onto road verges, and vegetation composition of road verges and other disturbed areas compared with adjacent undisturbed areas.

fertiliser, fire, native flora

WA:387

MUIR BG
1979
Observations on wind-blown superphosphate in native vegetation
The Western Australian Naturalist 14, 128-130

Western Australia
scientific

Superphosphate particles may be wind-blown into road reserve for several metres, raising soil phosphate levels by up to 8 times. Results: changes in vegetation morphology, flowering, fruit production, and probably long term vegetation changes.

fertiliser, native flora

WA:388

MUNICIPALITY OF THE SHIRE OF TOODYAY
1983
By-laws relating to road reserves
Local Government Act 1960-1982

Western Australia
management

Covers classification of road verges, burning and clearing permits.

fire, legislation

OS:389

MURRAY DM & ERNST UFW
1976
An economic analysis of the environmental impact of highway deicing
Environ. Prot. Technol. Ser., EPA- 600/2-76-105. 138 pp

USA
management

From a literature search and several surveys a cost estimate was made for water supplies and health, vegetation, highway structures, vehicles and utilities.

salinity

OS:390

MUSKETT CJ & JONES MP
1980
The dispersal of lead, cadmium and nickel from motor vehicles and effects on roadside invertebrate macrofauna
Environmental Pollution 23(3), 231-242

UK
scientific

Concentrations of lead, cadmium and nickel were measured in soil, air and vegetation along heavily trafficked raodsides. Increasing pollution apparently did not affect either number of individuals of invertebrates or species diversity.

invertebrate, fauna, lead, pollution

OS:391

MUSKETT CJ & JONES MP
1981
Soil respiration activity in relation to motor vehicle pollution
Water Air Soil Pollut. 15(3), 329-341

UK
scientific

The findings indicated that soil type is the dominant factor influencing the general level of soil microbiological activity at two roadsides in SE England.

pollution, vehicle exhaust

AU:392

NAISMITH L
1984
Distributional ecology of woodland birds in north-central Victoria and implications for conservation
Unpublished BSc (Hons) Thesis, Department of Geography, Monash University, Victoria

Victoria
scientific

Includes observations from censuses of birds along road verges.

birds

OS:393

NANKINOV DN & TODOROV NM
1983
Bird casualties on highways
Ekologiya 14(5), 62-68

Bulgaria
scientific

The number of bird casualties depended on the speed of the moving vehicle and the attractiveness of roadside biotopes.

birds, road-kill

OS:394

NATIONAL ACADEMY OF SCIENCES, USA
1957
Selective cutting of roadside vegetation for improved highway safety, appearance and use
Highway Research Board. 78 pp.

USA
management

Important to document the "before, during & after" status of selective cutting, construction and maintenance operations in order to provide a basis for development of criteria, costs & methods of procedure for future projects.

landscape, road safety

AU:395

NATIONAL ASSOCIATION OF AUSTRALIAN STATE ROAD AUTHORITIES
1982
The landscaping of roads
Haymarket, NSW. 20 pp.

New South Wales
management

Illustrated pamphlet describing the work of integrating roads into the landscape and the built environment.

landscape

AU:396

NATIONAL TREE PROGRAM
1985
National Tree Program information guide 1985. Part 1: Books, journal articles, research papers and reports
Department of Arts, Heritage and Environment. 95 pp.

Australia
general, management, scientific

Subject headings include agroforestry, ecology, fire, forestry, forests, international, mine rehabilitation, regeneration, roadsides, soil conservation, species, tree establishment, trees on farms, urban, wildlife, general.

bibliography, fauna, rehabilitation

WA:397

NATIONAL TRUST OF AUSTRALIA, WA
1968
Conservation of road verges
National Trust of Australia, WA

Western Australia
general

Importance of roadside vegetation, its present position and authorities responsible for management. Requests that Government establish expert committee to recommend on maintenance, preservation and development of road verges.

conservation, fauna, native flora

AU:398

NATIVE VEGETATION AUTHORITY
1987
Guidelines for the management of roadside vegetation
Department of Environment and Planning, SA

South Australia
management

Revision of The Roadside Vegetation Committee's Bulletin No. 3 (1984). The most important change relates to the fact that district councils must now consult the Native Vegetation Authority concerning certain roadside management activities.

clearing, fire, grazing, legislation, pest control, planting

AU:399

NATURAL RESOURCES CONSERVATION LEAGUE, VICTORIA
n.d.
Trees for farm and roadside planting
Natural Resources Conservation League, Victoria. 12 pp.

Victoria
management

not seen

planting

AU:400

NEALE R
1980
Healing the wounds. Part 1 and part 2.
Landscape Australia 2/80, 81-85 and 213.

Australia
management

Looks at mechanical and hand methods of stabilising batters and eroded areas.

construction, soil erosion

AU:401

NEVILL CJ
1978
Government control of wildlife habitat outside primitive nature reserves in Victoria, Australia
Unpublished M. Environmental Science thesis, Monash University, Melbourne

Victoria
management

not seen

fauna, legislation

AU:402

NICHOLSON J
1987
Country fire authority policy for roadside fire prevention
In: Roadsides conservation "asset or liability?"
Proceedings of a seminar held in Wodonga by the Wodonga Land Protection Regional Advisory Committee, Roadsides Conserv. Committee & Dept Conserv. For. & Lands (NE Region)

Victoria
management

not seen

fire

OS:403

NIERING WA & GOODWIN RH
1974
Creation of relatively stable shrublands with herbicides: arresting "succession" on rights-of-way and pastureland.
Ecology 55, 784-795

USA
management, scientific

Deals with Connecticut Arboretum Right-of-Way Demonstration Area, where aim to use ecologically sound techniques in vegetation management & selectively use herbicides to create shrub communities with high stability and wildlife values.

herbicide, succession

OS:404

NOGUEIRA SB & MARTINHO MR
1983
Leaf-cutting ants (Atta sp.), damage to and distribution along Brazilian roads
In: Jaisson P (Ed.) Social insects in the tropics. Proceedings of the first international symposium. Volume 2. Universite Paris-Nord, Paris. pp 181-186

Brazil
management, scientific

Mentions their "potential" for soil removal from the subsurface layers in the highway margins. Systematic control of these ants along highways is recommended.

invertebrate, pest control, planning

AU:405

NOLLER BN & SMYTHE LE
1974
Distribution of lead in vegetation bordering roads in the Sydney metropolitan area
Search 5, 108-110

New South Wales
scientific

Survey of lead in roadside plants at six sites in the Sydney metropolitan area.

lead, pollution

AU:406

O'CONNOR G
1984
Roadside tree establishment in South Gippsland
In: At Ground Level: a workshop on restoring local vegetation. Roadside Conservation Committee/ Department of Conservation, Forests and Lands. La Trobe University, Victoria

Victoria
general

Very short article outlining the problems of selecting, establishing and maintaining trees on roadsides.

native flora

OS:407

OECD (ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT) ROAD RESEARCH GROUP
1975
Roadside obstacles: their effects on the frequency & severity of accidents; devt & evaluation of countermeasures
OECD. 124 pp.

France
management

Includes an appendix which details policies practised in Europe regarding roadside trees that present a hazard to vehicles which leave the road.

road safety

AU:408

OATES N
1988
Draft catchment management strategy for the Mid-Goulburn catchment, Victoria

Victoria
management

Discusses the problems and issues of catchment management including roadsides and suggests strategies for action.

conservation, planning

OS:409

OETTING RB & CASSEL JF
1971
Waterfowl nesting on interstate highway right-of-way in North Dakota
Journal of Wildlife Management 35, 774-781

USA
management, scientific

Waterfowl chose unmowed vegetation in preference to mowed for their nest sites, and this increased nest success.

birds, fauna, mowing

AU:410

OLD KM
1979
Phytophthora and forest management in Australia
CSIRO, Melbourne

Australia
management, scientific

Nine papers on biology of Phytophthora cinnamomi (dieback) and forest management in Australia. Includes discussion of dieback spread through roadmaking.

construction, disease

OS:411

OLDFIELD PJ
1978
Chemical weed control in the highway: an engineer's assessment
Highways and Public Works 46, 9-10

UK
management

Discusses methods and procedures of application of various herbicides. Most suitable total herbicide was mixture of aminotriazole (for immediate kill), simazine (residual weed deterrent) and ammonium thiocyanate (as catalyst).

herbicide

AU:412

OLSEN DP
1976
Revegetation of roadside batters - Glen Innes
Journal of the Soil Conservation Service of NSW 32(2), 63-67

New South Wales
management

Technique for revegetating roadside batters using sandbags filled with mixed pasture seed, fertiliser and topsoil.

soil erosion

OS:413

OXLEY DJ & FENTON MB
1976
The harm our roads do to nature and wildlife
Canadian Geographical Journal 92(3), 40-45

Canada
general, management

Discusses vehicle killings, pollutants such as car exhausts, oil and salt, and problems of roads as barriers to animal movement. Briefly discusses management of road verges.

fauna, pollution, road-kill

OS:414

OXLEY DJ, FENTON MB & CARMODY GR
1974
The effects of roads on populations of small mammals
Journal of Applied Ecology 11, 51-59

Canada
scientific

Roadways inhibit movements of small forest mammals. Road surface not inhibiting but clearance (distance between wood on either side) most important - 20m an effective barrier to small mammals. May result in fragmentation of gene pool.

fauna, genetics, small mammal

AU:415

PACKHAM D
1987
Fire management on roadsides
In: Roadsides conservation "asset or liability?"
Proceedings of a seminar held in Wodonga by the Wodonga Land Protection Regional Advisory Committee, Roadsides Conserv. Committee & Dept Conserv. For. & Lands (NE Region)

Victoria
management

Outlines reasons for fire management and methods of assessment of fire hazards, as well as management methods.

fire

OS:416

PAGE FJ
1971
Waterfowl nesting on a railroad right-of-way in North Dakota
Journal of Wildlife Management 35, 544-549

USA
management, scientific

Suggest that for waterfowl production, annual mowing of managed areas should be stopped and only periodic burning, to alter plant succession, allowed.

birds, fauna, fire, mowing, railway, succession

AU:417

PALMER D & LEWIS S
1987
Mapping of roadside vegetation in South Australia
Roadside Vegetation Committee,
Department of Environment and Planning, South Australia

South Australia
management

Aims to provide data base which identifies roadsides of conservation value. A State overview is followed by seven regional descriptions, featuring vegetation and photo-point descriptions.

assessment, conservation, planning

AU:418

PARBERY DG
1981
Pollutants and Plant Health
In: Bragg GM (Ed.) Air Pollution Control, Part iv, Wiley.
pp 81-123

Australia
scientific

Review of effects of various pollutants on individual plants and plant communities. Covers pollutants found in vehicle exhausts.

pollution, vehicle exhaust

OS:419

PARR TW & WAY JM
1985
The ecological effects of maleic hydrazide and 2,4-D on roadside vegetation
1985 British Crop Protection Conference- Weeds
pp 1013-1020

UK
scientific

For 4 years little effect of maleic hydroxide on species richness of vegetation; thereafter decline in number and abundance of herbaceous species. Greater effect from 2,4-D. Discusses results in relation to ecology of grass swards.

herbicide, weed control

AU:420

PARSONS I
1982
Economic benefits of grazing road reserves
Paper presented at the Roadsides Symposium, City of Hamilton

Victoria
management

not seen

grazing

WA:421

PEDERSEN TA
1975
Highways as recreational outlets
Paper presented at Australian Institute of Parks and Recreation 48th annual conference, Perth, WA.

Western Australia
general

Covers road reserves, landscape principles, conservation, safety and amenities

conservation, history, landscape, native flora, road safety

WA:422

PEDERSEN TA & WALDEN JF
1973
Conservation and regeneration techniques
International Training Course in Road Engineering 5(1), Topic 15. Department of Main Roads, Perth. 39 pp.

WA
management

A summary of observations and trials concerning the principles of conservation and regeneration of native flora together with aspects of water and soil erosion problems.

conservation, rehabilitation, soil erosion

OS:423

PEPLER GRS
1969
Summing up
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
general, management

Emphasises need for communication between all levels and types of management bodies, and the importance of education.

conservation

OS:424

PERRING FH
1969
The botanical importance of roadside verges
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
scientific

History of roads and roadside verges in Britain, importance of road verges as relics of native grassland & sites of rare species, and a discussion of management for native flora.

history, native flora, railway

OS:425

PETERSEN A, ECKSTEIN D & LIESE W.
1982
Wood-biological investigations on the influence of deicing salt on roadside trees in Hamburg
Forstwiss. Centrlbl. 101(6), 353-364

Germany
scientific

Only oak and black locust do not exhibit any salt-influenced growth responses.

salinity

OS:426

PIENAAR U
1968
The ecological significance of roads in a national park
Koedoe (South Africa) 11

South Africa
management

not seen

conservation

AU:427

POLAKOWSKI KJ
1976
Roadscape design: landscape architectural fundamentals
Paper presented at the 32nd Conference of Municipal Engineers. Country Roads Board, Melbourne, Victoria.

Victoria
management

not seen

construction, landscape

OS:428

POLLARD E, HOOPER MD & MOORE NW
1974
Hedges
Collins, London. 256 pp.

UK
management, scientific

Considers the history, flora and fauna of hedgerows in Britain. Distinguishes the hedges of farmland from those of roadsides. Roadside hedges constitute most of those that are mapped.

fauna, hedgerow, native flora

OS:429

POMEROY JW
1985
An identification of environmental disturbances from road developments in subarctic muskeg
Arctic 38(2), 104-111

Canada
scientific

Hydro-thermal changes which influence muskeg vegetation are identified from examination of near-infrared Landsat images.

construction

OS:430

PORT GR & THOMPSON JR
1980
Outbreaks of insect herbivores on plants along motorways in the United Kingdom
Journal of Applied Ecology, 17(3), 649-656

UK
scientific

The increased N content of the plants probably increases the insect populations.

invertebrate, vehicle exhaust

OS:431

PORTER MR
1969
Road verges and landscape
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
management

Describes the different types of landscaping along roadsides which are appropriate to the type of road (speed of road and surrounding countryside).

landscape

OS:432

POURCIAU OM JR
1980
Chemicals reduce roadside vegetation management costs
Public Works 111(4), 83, 127

UK ?
management

Describes how through the use of herbicides, particularly selective ones, both the mowing frequency and the number of mowings per season can be reduced. Considerable savings from chemical weed control instead of mowing.

herbicide, mowing, weed control

AU:433

PRESSEY R, BROADBENT JA, KEMPER CH & ANDREW D
1981
Faunal studies for the proposed Wallarah Creek Interchange-Wallsend section of the Sydney-Newcastle freeway No. 3
Environmental and Urban Studies Report No. 67,
Macquarie University, North Ryde. Prepared for the
Department of Main Roads, New South Wales.

New South Wales
management, scientific

In 3 parts. Construction likely to result in fragmentation of habitat, soil erosion, lead and other pollution and wildlife mortality. Makes recommendations for construction and maintenance to minimise adverse effects.

construction, corridor, fauna, soil erosion

AU:434

PUBLIC WORKS DEPARTMENT, TASMANIA
n.d.
Roadside planting and tree control in Tasmania
Public Works Department, Tasmania. 31 pp.

Tasmania
management

Guide to selecting, planting and maintaining trees on roadsides for amenity and soil stabilisation. Lists species suitable for various purposes. Includes exotics, Australian mainland and Tasmanian species.

native flora, planting, soil erosion

OS:435

QUARLES HD III, HANAWALT RB & ODUM WE
1974
Lead in small mammals, plants and soil at varying distances from a highway
Journal of Applied Ecology 11, 937-949

USA
scientific

Survey of lead concentrations in soil, plants and small mammals at varying distances from a highway in Virginia.

fauna, lead, pollution, small mammal

AU:436

QUINLAN-WATSON TAF
1967
A new look at roadsides
South Australia Department of Agriculture, Leaflet No. 3862

South Australia
management

General (early) look at the potential of roadsides for conservation, problems of weed control, fire and utilities, rehabilitation and replanting.

conservation,fire,native flora,rehabilitation,weed control

WA:437

RALPH W
1986
Prblems for the West's cockatoo
Ecos 50, 23-25

Western Australia
scientific

Describes Saunders' work which shows Carnaby's cockatoo is declining in numbers due to lack of native food and fewer native trees. The situation of the galah and the Major Mitchell cockatoo is also considered.

birds, conservation, corridor

OS:438

RANDS MRW
1986
Effect of hedgerow characteristics on partridge breeding densities
Journal of Applied Ecology 23, 479-487

UK
scientific

Examines influence of field boundaries (including hedges) on partridge breeding densities on 10 UK farms. Hedgerow characteristics may be important in local spacing of breeding birds but not determining overall population size.

birds, fauna, hedgerow

OS:439

RANDS MRW
1987
Hedgerow management for the conservation of partridges Perdix perdix and Alectoris rufa
Biological Conservation 40, 127-139

UK
scientific

Where both the total amount of field boundary and the amount of residual ground vegetation are high, so are partridge populations. The most suitable nesting habitat exists in hedges trimmed every other year.

birds, conservation

OS:440

RATY M
1979
Effect of highway traffic on tetraonid densities
Ornis Fenn. 56(4), 169-170

Finland
scientific

A reduction of tetraonid densities by about two thirds was observed within 250m of the highways studied, and densities were apparently lower up to 500m.

invertebrate

AU:441

RAY S
1987
Assessment of roadside conservation values in the Gisborne Shire: case study in application of new assessment procedure
Arthur Rylah Institute for Environmental Research, Technical Report Series No. 29

Victoria
management

not seen

assessment

AU:442

RAYNER C, MARSH D & KEMP B
1984
Keilor Plains flora - a battle against extinction
In: At Ground Level: a workshop on restoring local vegetation. Roadside Conservation Committee/ Department of Conservation, Forests and Lands. (reprinted from Parkwatch, Journal of the Victorian National Parks Association, 139)

Victoria
general

Account of the campaign to protect the Keilor Plains flora along railsides in Victoria.

genetics, railway

OS:443

REED DF & WOODWARD TN
1981
Effectiveness of highway lighting in reducing deer-vehicle accidents
Journal of Wildlife Management 45, 721-726

USA
management

Highway lighting was not effective in reducing deer-vehicle accidents.

fauna, road-kill

OS:444

REED DF, POJAR TM & WOODWARD TN
1974
Use of one-way gates by mule deer
Journal of Wildlife Management 38, 9-15

USA
management

When 8-foot fencing adjacent to high-speed highways is used to reduce deer-vehicle accidents, should install one-way gates. Most deer will be able to pass through gate rather than be trapped on the highway and killed.

fauna, road-kill

OS:445

RICHARDSON EC, DISEKER EG & SHERIDAN JM
1970
Practices for erosion control on roadside areas in Georgia
Highway Research Record 335, 35-44

USA
management

Studies of the effect of vegetative cover on roadside erosion in Georgia. 41 plant species tested.

soil erosion

AU:446

RICHMOND TJ
1979
Control of erosion on roadworks
Soil Conservation Authority, Melbourne

Victoria
management

not seen

soil erosion

AU:447

RIKKEN BD
1988
A survey of roadside eucalypt dieback on Central Yorke Peninsula
Honors Thesis, School of Social Sciences, Flinders University of South Australia

South Australia
scientific

Dieback patterns are not related to any single cause, but to a range of complex and synergistically related biophysical factors.

disease, native flora

OS:448

RINARD JE
1986
Roadside vegetation management in Idaho
In: Roadside design and management,
Transportation Research Record 1075, 11-14

USA
management

Vegetation establishment work is classified as landscape or functional. This programme intended to hold maintenance costs at the lowest possible level while complying with State weed laws.

fertiliser, landscape, mowing, planning, planting, seeding

OS:449

ROACH GL & KIRKPATRICK RD
1985
Wildlife use of roadside woody plantings in Indiana
In: The roadside environment,
Transportation Research Record 1016, 11-15

USA
management, scientific

Right-of-way plantings for wildlife in 1976 were studied in June 1983 and January 1984. The plantings do provide a habitat that attracts a greater number and diversity of wildlife, especially birds.

birds, fauna, planting, road-kill

AU:450

ROAD CONSTRUCTION AUTHORITY
1983
Tree care
Road Construction Authority, Melbourne, Victoria

Victoria
management

Leaflet outlining means of treating some recurring problems that lead to the loss of existing and newly planted trees.

planting

AU:451

ROAD CONSTRUCTION AUTHORITY
1983
Planting techniques
Road Construction Authority, Melbourne, Victoria

Victoria
management

Leaflet dealing with roadside planting, from choice of species, through transportation, soil preparation, planting times and techniques and aftercare.

planting

AU:452

ROAD CONSTRUCTION AUTHORITY
1984
Roadside environmental awards, categories I & II: Murray Valley Highway, Lake Powell to Bannerton
Road Construction Authority, Melbourne, Victoria. 6 pp.

Victoria
general, management

Brief description of the preservation of roadside vegetation and road improvements carried out on the Murray Valley Highway, Victoria. Consists mainly of colour photos.

conservation, construction, rehabilitation

AU:453

ROAD CONSTRUCTION AUTHORITY, VICTORIA
1985
Fire prevention on declared road reserves in rural areas
Code of Practice, Road Construction Authority, Victoria

Victoria
management

not seen

fire

AU:454

ROAD CONSTRUCTION AUTHORITY, VICTORIA
1983
Planting Techniques
Road Construction Authority, Victoria

Victoria
management

not seen

planting

WA:455

ROAD VERGE CONSERVATION COMMITTEE OF WA
1983
Road verges in Western Australia
Road Verge Conservation Committee of WA

Western Australia
general, management

Reviews the work of the RVCC since 1970 and reviews the progress made with the recommendations made to Government then.

corridor, fire, native flora, weed control

AU:456

ROADSIDE VEGETATION COMMITTEE
1984
Guidelines for the management of roadside vegetation by district councils
Roadside Vegetation Committee, Bulletin No. 3

Australia
management

General management recommendations for district councils, covering most aspects of roadside vegetation.

fire, grazing, legislation, planting, weed control

AU:457

ROADSIDE VEGETATION COMMITTEE
n.d.
Roadside vegetation
Roadside Vegetation Committee, Adelaide, SA

South Australia
general

Leaflet summarising benefits of native vegetation on roadsides. Summarises relevant management, including the South Australian RVC.

conservation

AU:458

ROADSIDE VEGETATION COMMITTEE
1979
The role and objectives of the Roadside Vegetation Committee
Roadside Vegetation Committee, Bulletin No. 1. 6 pp.

South Australia
general, management

Lists members and outlines the aims and responsibilities of the group. Defines its legal position and states policies of public utilities and service departments.

conservation

AU:459

ROADSIDE VEGETATION COMMITTEE
1978
Guidelines applying to the removal of roadside vegetation
Roadside Vegetation Committee Bulletin No. 2
3 pp and 1 fold-out chart

South Australia
management

Outlines factors to be taken into account when considering the removal of roadside vegetation for specific reasons, with particular regard to road safety, bushfire control and the needs of government utilities.

clearing

AU:460

ROADSIDES CONSERVATION COMMITTEE
1982
Guidelines for management of roadsides having regard to both conservation and fire prevention
Ministry for Conservation (now Department of Conservation, Forests and Lands), Victoria. 12 pp.

Victoria
management

Discusses firebreak construction methods and compares effectiveness, cost and environmental effects. Photographs of examples.

fire, herbicide, mowing

AU:461

ROADSIDES CONSERVATION COMMITTEE
1986
Guidelines for selection of species for roadside planting
Roadsides Conservation Committee. 9 pp.

Victoria
general, management

Guide to choosing indigenous species suitable for site; planting and seeding recommendations.

genetics, native flora, planting, seeding, rehabilitation

AU:462

ROADSIDES CONSERVATION COMMITTEE
1980
Roadsides of today and tomorrow
Proceedings of a conference held in Melbourne, Victoria on 21 June 1980.

Victoria, South Australia, Western Australia
management

Seven papers on aspects of roadside conservation.

conservation

AU:463

ROADSIDES CONSERVATION COMMITTEE, VICTORIA/ DEPARTMENT OF CONSERVATION, FORESTS AND LANDS
1984
At Ground Level
Proceedings of a workshop on restoring local vegetation. La Trobe University, Victoria. November 1984

Victoria
general, management, scientific

12 papers discussing the problems of restoring local vegetation in small remnants of public land.

native flora, rehabilitation

AU:464

ROBINSON NH
1977
The need for joining Illawarra wilderness areas
Australian Zoologist 19, 125-132

New South Wales
management, scientific

Proposes system of corridors to allow mammal movement between existing reserves which may become isolated through changing land use and road construction.

corridor, fauna, island biogeography

OS:465

ROSS RS
1981
Roadside vegetation management: old problems and new approaches
Public Works 112(3), 62-63, 131

USA
management

Describes Pennsylvania's use of helicopter aerial spraying and herbicides used for control of Canada thistle on highway rights-of-way.

herbicide, weed control

OS:466

ROSS SM
1986
Vegetation change on highway verges in south-east Scotland
Journal of Biogeography 13(2), 109-117

UK
scientific

Survey of highway verges 10 and 20 years after seeding with grass seed. Different plant communities developed according to type of road embankment and type of verge management.

herbicide, mowing, planting, seeding

OS:467

ROSSITER JA & CRAWFORD RD
1983
Evaluation of artificial wetlands in North Dakota: recommendations for future design and construction
In: Wetlands, floodplains, erosion, and storm water pumping, Transportation Research Record 948, 21-25

USA
management

Several recommendations are presented for artificial wetland design and construction based on both the results of the 2-year study and the habitat requirements of breeding waterfowl.

birds, soil erosion, wetlands

OS:468

ROST GR & BAILEY JA
1979
Distribution of mule deer and elk in relation to roads
Journal of Wildlife Management 43(3), 634-641

USA
scientific

Mule deer and elk avoid roadsides, particularly areas within 200m of road.

fauna

WA:469

RUNDLE GE
1982
Proposed environmental road widening, NW Coastal highway, north of the Murchison river: results of literature survey
Main Roads Department, WA

Western Australia
management

Discusses desirable road reserve widths in pastoral and agricultural areas. Also concerned with the impact of roadside drainage works.

conservation, construction, planning

OS:470

RUSCH AJ, THOMPSON DR & KABAT C
1980
Management of roadside vegetative cover by selective control of undesirable vegetation.
Tech. Bull., Dep. Nat. Resour., Madison, Wis. 117.
32 pp.

USA
management

Cover indexes exceeding 80% were obtained on some segments during the 18 yr with low costs and no resort to planting or seeding.

planning

AU:471

RUSSELL TH
1980
Roadside conervation in Victoria including the allocation of resources
In: Roadsides of today and tomorrow. Proceedings of a conference held in Melbourne, Victoria. Roadsides Conservation Committee.

Victoria
management

Describes efforts of highway authorities to practice landscaping and conservation on road reserves, including costs involved. Includes several photos of examples.

conservation, construction

AU:472

RUTHERFORD PA
1977
Weed control on road verges
Department of Agriculture, WA

Australia
management

Lists type of herbicide, time and rate of application for various groups of weeds.

herbicide, weed control

OS:473

RUTTER AJ & THOMPSON JR
1986
Simulation of the effects of salt usage and rainfall on Na & Cl concentrations in the soil of central reserves
Journal of Applied Ecology 23(1), 281-297

UK
scientific

Use of a mathematical model to calculate the changes of sodium and chloride concentrations with time and depth in soil.

salinity

OS:474

SARGENT C
1984
Britain's railway vegetation
Institute of Terrestrial Ecology, Cambridge. 34 pp.

UK
management, scientific

An inventory of railway species and vegetation on which a general strategy for conservation and management of railway verges can be based. Long-term monitoring sites and experimental work on disturbance and recovery now underway.

conservation, railway

OS:475

SARGENT C, MOUNTFORD O & GREENE D
1986
The distribution of Poa angustifolia L. in Britain
Watsonia 16, 31-36

UK
scientific

Railside habitats considerably extend the known range of Poa. Habitat (warm, freely draining) and management factors (absence of heavy grazing and trampling) favour its establishment on railway land.

railway

WA:476

SARGENT PA
1987
Putting nature back into the nature strip: guidelines for the planning and landscaping of roads in Perth.
Graduate Diploma in Urban and Regional Planning

Western Australia
management

Recommends the undergrounding of utilities and common trenching; drainage of surface runoff into vegetated verges; and the conservation and regeneration of native vegetation on roadsides. Landscape guidelines are provided.

conservation, landscape, planting, pollution, soil erosion

OS:477

SARGENT, C
1984
A review of vegetation control on British Rail land
Aspects of Applied Biology 5, 1-7

UK
scientific

Reviews development of vegetation control methods on BR land and discusses current policy from environmental viewpoint.

railway, weed control

OS:478

SAUDER DW, LINDER RL, DAHLGREN RB & TUCKER WL
1971
An evaluation of the roadside technique for censusing breeding waterfowl
Journal of Wildlife Management 35, 538-543

USA
management

Research into the number of replicate counts of a roadside transect needed to establish a statistically sound population index of breeding waterfowl. Influence on counts of wind, light intensity, vegetative phenology & wetland size.

birds, wetlands

WA:479

SAUNDERS DA
1977
The effect of agricultural clearing on the breeding success of the white-tailed black cockatoo
Emu 77, 180-184

Western Australia
scientific

Lower breeding success in a mostly cleared area related to patchy distribution of reserves and hence food: more time must be spent foraging. Corridors of vegetation linking reserves need to be continuous.

birds, corridor, fauna

WA:480

SAUNDERS DA & INGRAM JA
1987
Factors affecting survival of breeding populations of Carnaby's cockatoo in remnants of native vegetation
In: Saunders DA, Arnold GW, Burbidge AA & Hopkins AJM (Eds). Nature conservation: the role of remnants of native vegetation. Surrey Beatty & Sons, Chipping Norton, NSW.
pp 249-258

WA
scientific

Carnaby's cockatoo can breed successfully in areas which have been extensively cleared providing there are corridors of native vegetation connecting patches of remnant vegetation.

birds, conservation, corridor

WA:481

SAUNDERS DA, ROWLEY I & SMITH GT
1985
The effects of clearing for agriculture on the distribution of cockatoos in the south west of Western Australia
In: Keast A, Recher HF, Ford H & Saunders DA (Eds). Birds of the eucalypt forests and woodlands: ecology, conservation and management. Surrey Beatty & Sons, Chipping Norton, NSW. pp 309-321

Western Australia
management, scientific

Includes use of roadsides as habitat corridor

birds, conservation, corridor, fauna

OS:482

SCANLON PF
1987
Heavy metals in small mammals in roadside environments: implications for food chains
In: Hamilton RS & Harrison RM (Eds). Special issue: highway pollution. Proceedings of the second international symposium London, UK.
Sci. Total Environ. 59, 317-323

UK
scientific

Concentrations of lead, cadmium, nickel and zinc were high in earthworms. Shrews had higher concentrations of lead and cadmium than other small rodents.

invertebrate, lead, pollution, small mammal

OS:483

SCHMIDT JP
1978
Roads and their associated open spaces in Denmark
Landskap 59(1), 14-17

Denmark
management

Describes a project in which 120 acres of open spaces were planted in order to integrate them into the landscape. Lack of success was related to insufficient attention to the soil.

planning, rehabilitation

AU:484

SCOTT & FURPHY ENGINEERS, GUTTERIDGE, HASKINS & DAVEY
1976
The Arthur Highway: a study in landscape conservation

Tasmania
management

This is a study of the problems of evaluating and preserving the landscape elements of the Arthur Highway. A statement of planning policy is produced outlining future direction and planning of this road and environment.

landscape, planning

WA:485

SCOTT JK
1981
A survey method for identifying roadside flora suitable for conservation in Western Australia
Department of Fisheries and Wildlife, Report No. 41

Western Australia
management

Survey method based on percentage weed cover, width of verge and vegetation structure, plus any special attributes and aesthetic qualities. Suitable for untrained person, but long term research needed to answer questions about conservation.

assessment, conservation, native flora

WA:486

SCOTT JK
1980
Report on the conservation of roadside flora in south-west Australia
Western Australian Herbarium

Western Australia
management

not seen

conservation, native flora

OS:487

SCOTT NE & DAVISON AW
1982
Deicing salt and the invasion of road verges by maritime plants
Watsonia 14(1), 41-52

UK
scientific

Description of maritime species on British roadsides and mapping of the most widespread species, Puccinellia distans.

salinity

OS:488

SCOTT NE & DAVISON AW
1985
The distribution and ecology of coastal species on roadsides
Vegetatio 62(1-3), 433-440

UK
scientific

Species on roadsides occur in distinct zones with the coastal species confined to the road margin affected by deicing salt.

salinity

OS:489

SCOTT WS
1980
Deicing salt levels in Toronto stream banks and roadside soils
Bulletin of Environmental Contamination and Toxicology
25(2), 208-214

Canada
scientific

Although much of the Na and Cl is leached away, there is some accumulation from year to year, especially with Na. Na and Cl contents were higher in stream bank compared with control soil.

salinity

WA:490

SEABROOK J
1984
Regeneration of small bush areas
In: Moore SA (Ed.) The management of small bush areas in the Perth metropolitan region. Proceedings of a seminar held on 20 Sept 1983 by the Department of Fisheries and Wildlife pp 41-42

Western Australia
general

Gravel pit left after road construction chosen for an experimental seed orchard using species of native shrubs. Three years after seeds planted wildflower seeds were available from the orchard.

native flora, rehabilitation, seeding

AU:491

SEDDON G
1974
Keynote address
In: Forum on roadsides and conservation. Proceedings of a conference held by VNPA, NRCL, CCV and TCPA.

Australia
general, management

Deals with roadsides as migration and dispersal routes for plants and animals, different types of roads, and the problems of planning for the different functions of each type.

conservation, corridor, landscape

WA:492

SELECT COMMITTEE OF THE LEGISLATIVE ASSEMBLY APPOINTED TO INQUIRE INTO BUSH FIRES IN WESTERN AUSTRALIA
1984
Final Report

Western Australia
management

Includes Main Roads Department and Westrail policies on controlled burning and firebreak construction, ecological considerations and roadside burning.

fire

AU:493

SEYMOUR N
1988
Managing weeds on linear reserves
In: Weeds on public land- an action plan for today.
A symposium presented by the Weed Science Society of Victoria Inc. and the School of Environmental Science, Monash University

Victoria
management

Identifies the major weeds and the special problems faced by a manager of a linear reserve. Stresses the need for planning in overcoming problems.

planning, weed, weed control

OS:494

SHARP WC, ROSS RS, TESTERMAN MW & WILLIAMSON R
1980
Ability of crownvetch to suppress woody plant invasion
J. Soil Water Conserv. 35(3), 142-144

USA
scientific

Where crownvetch (Coronilla varia) cover exceeded 80%, the number of woody plants was as low as 7 plants/1000sq metres.

biological control

WA:495

SHAW RE
1986
The importance of conserving roadside vegetation
Local Government Roadside Vegetation Conservation regional seminar. 28 pp.

Western Australia
general, management

The aesthetic and ecological values of roadside vegetation and the planning and management policies aimed at conserving it.

assessment, construction, fire, legislation, planning, weed

WA:496

SHAW RE
1982
Workmanship in the road construction process
Main Roads Department, WA

Western Australia
management

Includes recommendations for earthworks to reduce damage to road verge vegetation and guidelines for successful rehabilitation.

construction, rehabilitation

WA:497

SHAW RE & RUNDLE G
1985
Concern at sand drift
Western Roads October 1985, 19-20

Western Australia
general, management

Summary of present state of legislation and road management principles relating to sand drift.

legislation, soil erosion

OS:498

SHERBURNE J
1985
Wildlife populations utilizing right-of-way habitat along Interstate 95 in Northern Maine
In: The roadside environment,
Transportation Research Record 1016, 16-20

USA
scientific

Monitoring 1975-1982. Movements & densities of birds and mammals adjacent to and away from I-95 did not differ significantly during and after construction. Short and long term effects are discussed.

birds, fauna, small mammal

OS:499

SHERWOOD PT
1970
Establishment and maintenance of roadside vegetation. A review of methods available
Report No. LR 351, Road Research Laboratory, Ministry of Transport, Great Britain. 15 pp.

UK
management

Describes methods available for establishing roadside vegetation and details of maintenance programmes for verges along different types of road. Reviews cutting equipment and chemicals, and different methods of maintenance.

herbicide, mowing, planting, seeding, weed control

AU:500

SHIRE OF MORNINGTON HARBOUR
1986
Environmental strategies and guidelines for the management and conservation of linear reserves and parklands
Council staff manual, 5th draft. 69 pp.

Victoria
management

Guidelines for the ecologically based management of road, stream, park and foreshore reserves within the Shire of Mornington Harbour.

corridor,fire,herbicide,legislation,planting,rehabilitation

OS:501

SHULDINER PW, COPE DF & NEWTON RB
1979
Ecological effects of highway fills on wetlands
National Cooperative Highway Research Program Report No.218B
105 pp.

USA
management, scientific

Project aimed to describe ecological effects of placing highway fills on wetlands and associated floodplains, and to develop initial guidelines as management tool for decision-making regarding routes, fills and other design alternatives

construction, wetlands

OS:502

SHULDINER PW, COPE DF & NEWTON RB
1979
Ecological effects of highway fills on wetlands: user's manual
Transportation Research Board,
National Cooperative Highway Research Program Report 218B.
99 pp.

USA
scientific

A series of flow charts and matrices demonstrate a relationship between the physical modifications of the environment and the probable biological response.

construction, wetlands

AU:503

SILLAR DI
1969
Control of grader grass (Themeda quadrivalvis)
Queensland Journal of Agriculture and Animal Sciences
26, 581-586

Queensland
management, scientific

Grader grass common along roadsides. Describes experiments on prevention of pasture invasion. Regeneration was enhanced by pre-wet season heavy defoliation and burning, and suppressed by pasture resting. Seed degenerates in soil.

weed control

OS:504

SIMINI M & LEONE IA
1986
Studies on the effects of deicing salts on roadside trees
Arboricultural J. 10(3), 221-231

USA
scientific

Reviews existing knowledge concerning salinity and injury to roadside trees.

salinity

AU:505

SIMONS JP & MILLER GD
1968
The highway, the landscape and you
Paper presented at Australian Road Research Board 4th convention, Melbourne

Australia
general

Early paper urging need for highway landscaping for conservation. Covers practical problems of compromising between highway design and landscaping.

conservation, fire, landscape, planting, soil erosion

AU:506

SIMONS PF
1984
Removal of ground storey plants from a building site to the adjoining median strip
In: At Ground Level: a workshop on restoring local vegetation. Roadside Conservation Committee/ Department of Conservation, Forests and Lands. La Trobe University, Victoria

Tasmania
general

Transplanting several herb and shrub species from building sites to the median strips of nearby roads was successful for 4 years (until the site was bulldozed).

planting, rehabilitation

OS:507

SINGER FJ, LANGLITZ WL & SAMUELSON EC
1985
Design and construction of highway underpasses used by mountain goats
In: The roadside environment,
Transportation Research Record 1016, 6-10

USA
management, scientific

Cyclone fencing and reinforced earth walls forced goats to use the bridges in a 500 ft crossing zone.

construction, fauna, road-kill

OS:508

SINHA KC, HU K & RIVERSON JDN
1984
Current practices of harvesting hay on highway rights-of-way
Transportation Research Record 969, 40-45

USA
management

The various aspects considered include legal problems, geographic condition, traffic safety, economic benefit, contamination of hay, and aesthetic and environmental concerns.

lead, planting, pollution, road safety

WA:509

SKENDER GC
1982
Vegetation control on road reserves: report A
Main Roads Department, WA. Internal Technical Report, Materials Engineering Division. 27 pp.

Western Australia
management

Discusses importance of integrating herbicide control of vegetation with mechanical maintenance. Foliar active, soil residual and growth retarding chemicals dealt with, also preventative methods. Includes proposals for future research

herbicide, weed control

WA:510

SKENDER GC
1982
Vegetation control on road reserves: report B
Main Roads Department, WA: Internal Technical Report, Materials Engineering Division.

Western Australia
management

Detailed supplement to Skender (1982) Report A.

herbicide, weed control

AU:511

SKURLOW J
1964
The use of bitumen in soil conservation and in the control of roadside erosion
Soil Conservation Journal of NSW 20, 200-214

New South Wales
management

Bitumen sprayed over prepared and seeded or planted roadside protects soil from erosion and allows vegetation cover to develop through it.

seeding, soil erosion

OS:512

SMITH DL
1977
Wildlife considerations in managing highway rights-of-way
Transportation Research Record 647, 23-25

USA
management

Summary of highway habitat conditions and general recommendations for managing roadside habitats for wildlife.

construction, fauna, mowing

OS:513

SMITH DL
1984
Method for wetland functional assessment
Transportation Research Record 969, 17-23

USA
management

The method uses three types of analyses: the threshold, the comparative and the mitigative.

assessment, wetlands

AU:514

SMITH J
1987
An environmental viewpoint of roadsides
In: Roadsides conservation "asset or liability?"
Proceedings of a seminar held in Wodonga by the Wodonga Land Protection Regional Advisory Committee, Roadsides Conserv. Committee & Dept Conserv. For. & Lands (NE Region)

Victoria
general

not seen

conservation

AU:515

SMITH JMB
1982
Naturalised fruit trees on New England roadsides
Search 13, 207-208

New South Wales
general

At least 35 taxa of alien woody plants are naturalised on New England (NSW) roadsides, probably from cores discarded by travellers. Roadside fruit trees harbour disease but may include desirable genotypes and add to landscape aesthetics.

disease, weed

AU:516

SMITH JMB
1982
Establishment of exotic woody plants along roadsides in New England (New South Wales)
Department of Geography, University of New England, Armidale. 62 pp.

New South Wales
scientific

Describes exotic woody plants including fruit trees along New England roadsides. Dispersal by birds or car passengers. Exotics add to aesthetic value but may harbour disease. May have new genetic combinations useful for cultivation.

disease, genetics, weed

AU:517

SMITH JMB
1984
Feral fruit trees on New England roadsides
In: Groves RH & Burdon JJ (Eds). Ecology of biological invasions. Cambridge University Press, New York. p 158

New South Wales
scientific

Besides the cherry plum, most feral fruit trees do not regenerate in situ.

weed

WA:518

SMITH RS
1988
A survey of the effects of fuel reduction burning on the vegetation of rural road verges in the SW of W Australia
Population and World Resources Project, Murdoch University

Western Australia
management, scientific

The species composition and cover data were analysed using TWINSPAN, a classificatory computer programme. Fewer native species are found on highly disturbed sites.

fire, native flora, weed

OS:519

SMITH WH
1976
Lead contamination of the roadside ecosystem
Journal of the Air Pollution Control Association 26(8), 753-766

USA
scientific

Review paper dealing with distribution, localisation and possible interactions of lead originating from traffic in atmosphere, soil and vegetation of roadside.
Contains 156 references.

lead, pollution

AU:520

SOIL CONSERVATION AUTHORITY
1978
Inquiry into salinity control and drainage in northern Victoria
Victoria's Resources 20(4), 23-25

Victoria
scientific

Soil erosion and salinisation both related to hydrological changes following replacment of deep-rooted natives by shallow-rooted crops and pastures. Gives summary of report by SCA on Northern Slopes Land Deterioration Project (1978).

salinity, soil erosion

OS:521

SOMER G AYDIN H
1985
Determination of lead in roadside soil using anodic-stripping voltammetry
Analyst 110(6), 631-634

Turkey
scientific

Gives details of this method of determining lead content in roadside soil in Ankara. Note the use of aqua regia and EDTA.

lead, pollution

OS:522

SPATT PD & MILLER MC
1981
Growth conditions and vitality of Sphagnum in a Tundra community along the Alaska pipeline haul road
Arctic 34(1), 48-54

USA
scientific

Examines the effect of road dust on S. lenense: its total conductivity, pH, calcium, chlorophyll content and carbon uptakes.

pollution

AU:523

SPENCER R
1986
Fashions in street tree planting in Victoria
Landscape Australia 4, 304-309

Victoria
general

Identifies 1850-70 period as one of planting evergreens; 1870-1910 deciduous; 1910 to the present native plants.

history, planning, planting

AU:524

SPOONER P
1969
Highway landscape design
Report prepared for the Australian Road Research Board.
255 pp.

Australia, overseas
management, scientific

Examines the problems associated with visual and recreational aspects of highway design, and describes the various measures which overseas countries have adopted to overcome them.

landscape, soil erosion

OS:525

SPOONER P
1969
Highway landscape design
Report prepared for the Australian Road Research Board.
255 pp.

Australia, overseas
management, scientific

Examines the problems associated with visual and recreational aspects of highway design, and describes the various measures which overseas countries have adopted to overcome them.

landscape, soil erosion

OS:526

SPOONER P
1961
Highway landscaping in the United States, 1961
Report prepared for the Australian Road Research Board.
56 pp.

USA
management

A report based on a 30 day inspection on tour of roadsides in USA which describes these problems and the means adopted to overcome them. Tour undertaken with reference to roadside development in NSW.

soil erosion, fertiliser, herbicide, landscape, mowing

OS:527

STADTHERR RJ, MANNINO J & NEWSOM DW
1984
Ground covers for Louisiana highways
Transportation Research Record 969, 32-36

USA
management, scientific

Over 8 years it was found that the liriope rated highest in overall appearance, weed presence and establishment over a 13 month period.

planting, weed

AU:528

STATE ELECTRICITY COMMISSION, VICTORIA
n.d.
Caring for trees
State Electricity Commission, Victoria. 16 pp.

Victoria
management

This booklet uses clear diagrams to point out correct branch removal techniques and suggests ways to prevent other forms of tree damage.

conservation, road safety

AU:529

STATE ELECTRICITY COMMISSION, VICTORIA
1984
Guide to tree planting near power lines: a description of suitable varieties
State Electricity Commission, Victoria. 50 pp.

Victoria
management

Outlines general rules, recommends species for planting and makes suggestions for arrangement and planting of windbreaks and shelterbelt.

planting, road safety

WA:530

STATE ENERGY COMMISSION, WA
n.d.
Power line clearing procedures
State Energy Commission, WA

Western Australia
management

The booklet distinguishes urban, semi-rural and rural profiles and gives advice as to how and how much clearing should be done.

clearing, road safety

AU:531

STATE TRANSPORT AUTHORITY OF VICTORIA
n.d.
Victorian railways - beautification proposals and plans
Internal document, State Transport Authority of Victoria

Victoria
management

not seen

railway

AU:532

STEVENS RM
1983
Bushfires and roadside vegetation
Report to Roadside Vegetation Committee, South Australia. July 1983. 28 pp.

South Australia
management, scientific

Assesses (by literature survey and interviews) role of roadside vegetation in promoting spread of fire and hazard to firefighters. Concludes management should minimise disturbance to native vegetation, except firebreaks & access

fire, native flora

AU:533

STEVENS RM
1983
Coast wattle on roadsides in the south-east of South Australia
Roadside Vegetation Committee, South Australia

South Australia
management, scientific

Investigates increase in coastal wattle (Acacia longifolia var sophorae), and success and impact of control measures such as fire and cutting. Combines field observations with information on wattle biology and nature of roadside habitat

fire, succession, weed control

OS:534

STREETER DT
1975
Road verges - a local responsibility for conservation
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
management

Role of local voluntary groups such as County Trusts in road verge conservation and management.

conservation, legislation

OS:535

STRUSINSKI A
1978
Contamination of the environment with lead from exhaust gases of cars
Rocz. Panstw. Zakl. Hig. 29(4), 411-417

Poland
scientific

The lead level of plant tissues was low (3-8%) despite its high concentration in the environment. The highest concentration of lead was found at distances up to 10m from the roadway.

lead, pollution

AU:536

STUWE J
1986
Assessment of conservation status of native grassland on the Western Plains, Victoria, & sites of botanical significance
Arthur Rylah Institute for Environmental Research Technical Report Series No. 48

Victoria
management, scientific

Includes native grassland remnants on road and rail reserves

conservation, native flora, railway

AU:537

STUWE J & PARSONS RF
1977
Themeda australis grasslands on the Basalt Plains, Victoria: floristics and management effects
Australian Journal of Ecology 2, 467-476

Victoria
scientific

Themedia australis (kangaroo grass) now found only as remnants along roadsides, railsides or paddocks with no heavy grazing. Describes floristics of remnants and relates site differences to management practices.

fire, grazing, native flora, railway

AU:538

SUCKLING GC
1984
Population ecology of the sugar glider Petaurus breviceps in a system of fragmented habitats
Australian Wildlife Research 11, 49-75

Victoria
scientific

Study of population ecology of sugar glider in remnant of native vegetation. Roadside strip of forest linking study site to outside areas was probably important in maintaining study site population.

corridor, fauna

OS:539

SULLIVAN R & FOOTE LE
1983
Roadside erosion causes and factors: Minnesota survey analysis
In: Wetlands, floodplains, erosion, and storm water pumping, Transportation Research Record 948, 47-54

USA
management

More construction of roads with a fill cross-sectional design and less of cut-fill roads, especially in rough terrain, should reduce the potential for future erosion.

soil erosion

OS:540

TES RESEARCH AND CONSULTING LTD
1980
Alberta roads- environmental design guidelines
Alberta Transportation, Calgary

USA
management

not seen

landscape

OS:541

TABOR R
1974
Earthworms, crows, vibrations and motorways
New Scientist 62(899), 482-483

UK
general, scientific

Observations suggest crows and rooks are drawn to freeway rather than fields or other roads. This may be due to vibrations from traffic causing earthworms to surface. Effect stronger in moist soil.

birds, fauna, invertebrate

OS:542

TAYLOR RL
1981
Weeds of roadsides and waste ground in New Zealand
RL Taylor, Nelson. 176 pp.

NZ
scientific

Describes 230 weeds and contains 300 black and white photographs.

weed

OS:543

TAYLOR WD
1969
Roadsides- clear and clean
Dept of Agriculture and Food, Ontario. Publication 550.

USA
management

Assessment of weed and brush growth and the selection of herbicides to control their growth.

weed control

AU:544

TEMPLE JM
1980
Revegetation: methods and management
Australian Parks and Recreation. Aug.,30-34

New South Wales
management

Suggests ways to go about rehabilitating disturbed areas so that the revegetation will be permanent and based on ecological principles. Stresses the need for weed control.

rehabilitation, weed control

OS:545

THIEL RP
1985
Relationship between road densities and wolf habitat suitability in Wisconsin
Am. Midl. Nat. 113(2), 404-407

USA
management, scientific

Wolf habitat management plans should incorporate road density limits which should not exceed 0.93mile/miles in order to sustain a breeding population of wolves.

fauna

AU:546

THOMAS G
1988
Roadside vegetation: a selective practical bibliography for rural Victoria
Graduate Diploma in Librarianship at Ballarat College of Advanced Education.

Victoria
general

28 annotated entries divided into eleven sections (eg fire prevention, landscaping) and cross referenced. Selection has tried to minimise duplication.

bibliography

AU:547

THOMAS J
1980
Roadside management - the local government point of view
In: Roadsides of today and tomorrow. Proceedings of a conference held in Melbourne, Victoria. Roadsides Conservation Committee.

Victoria
management

Summarises efforts of local government to conserve roadside environment over last 20 years, particularly in urban areas.

history

OS:548

THOMPSON JR
1986
Roadsides: a resource and a challenge
In: Bradshaw AD, Goode DA & Thorp E (Eds). Ecology and Design in Landscape. Blackwell Scientific Publications, Palo Alto, California. pp 325-340

USA
management

Describes site preparation and planting of verges with a view to their future wildlife potential.

conservation, fauna, landscape, lead, planting, salinity

OS:549

THOMPSON JR & RUTTER AJ
1986
Effects of NaCl on some native British shrub sp, & the poss-ibility of est. shrubs on central reserves of motorways
Journal of Applied Ecology 23(1), 299-315

UK
management, scientific

From a knowledge of Na and Cl concentrations in the soil, it seems that many sp could grow on median strips in southern England, but not in the north and particularly not in the extreme north-east.

planting, salinity

OS:550

THOMPSON JR, RUTTER AJ & RIDOUT PS
1986
Variation in time and between regions in the salinity of soils on central reserves
Journal of Applied Ecology 23(1), 251-267

UK
scientific

Observations extending over 6 years suggested that there was no consistent annual increase in the salinity of the soils of median strips.

salinity

OS:551

THOMPSON JR, RUTTER AJ & RIDOUT PS
1986
Distance from the carriageway and other sources of local variation in salinity
Journal of Applied Ecology 23(1), 269-280

UK
scientific

Soil Na concentration on median strip was 50-70% of the value 0.5m from carriageway. Results varied with presence of shrubs and hard shoulder but not with road curvature.

planting, salinity

AU:552

THORP RD
1983
Roadside landscapes
In: Trees in urban and rural landscapes. Proceedings of a conference organised by the Victorian Department of Agriculture, Albury-Wodonga, April 1983

Victoria
management

Considers landscaping along road reserves, especially trees: clearing should be minimised where possible and replanting should maintain the original landscape character. Minimal maintenance desirable, if compatible with fire control.

construction, landscape, planting

OS:553

THRASHER MH
1983
Highway impacts on wetlands: assessment, mitigation, and enhancement measures
In: Wetlands, floodplains, erosion, and storm water pumping, Transportation Research Record 948, 17-20

USA
management

General wetland types and their basic functions and values are identified, and highway construction impacts, impact assessment, and mitigation and enhancement prodedures are discussed.

assessment, wetlands

OS:554

TOROK K, KLINESEK P & PODANI J
1979
A comparative study of deicing salt damage to three abundant tree species of Budapest boulevards
Bot. Kozl. 66(1), 19-27

Hungary
scientific

Studies tree injury, especially marginal scorching of leaves in Celtis occidentalis, Tilia tomentosa and Platanus acerifolia.

salinity

AU:555

TRAFFIC AUTHORITY OF NSW
1982
Provisional guidelines for tree planting on urban roads
Traffic Authority of NSW. 8 pp.

New South Wales
management

Deals primarily with minimun lateral clearances and sight distance requirements for verge planting under various traffic conditions.

planting, road safety

AU:556

TRAFFIC AUTHORITY OF NSW
1987
Guidelines for tree planting and maintenance on urban roads
Traffic Authority of NSW. 39 pp.

New South Wales
management

Aims to encourage tree planting and maintenance which accomodate road safety concerns. Updates the 1982 Provisional Guidelines for tree planting on urban roads.

planting, road safety

AU:557

TRANSMISSION ENGINEERING DEPARTMENT, BRISBANE
1984
Powerline route clearing practice: technique for specific cases
Transmission Engineering Department, Brisbane

Queensland
management

Includes diagrams which illustrate techniques for negotiating specific sites.

road safety

AU:558

TRANSMISSION ENGINEERING DEPARTMENT, BRISBANE
1984
Powerline route location guidelines
Transmission Engineering Department, Brisbane

Queensland
management

Outlines the principles of route selection, emphasising unobtrusiveness. Gives practical guidance in overcoming specific problems.

landscape, road safety

OS:559

TRANSPORTATION RESEARCH BOARD
1981
Proceedings of a symposium on roadside vegetation management and manipulation, August 3-8 1980, San Antonio, Texas
Transportation Research Record 805, 8-23

USA
management, scientific

29 abstracts from the symposium.

herbicide, pollution, seeding, weed control

OS:560

TRANSPORTATION RESEARCH BOARD
1976
Effects of deicing salts on plant biota and soil (experimental phase)
National Cooperative Highway Research Program Report 170.
88 pp.

USA
scientific

Details the effect of sodium chloride and calcium chloride on woody plants and grasses. Ions in fertilisers influence plant growth and its chemical uptake from deicing salts.

salinity

OS:561

TRANSPORTATION RESEARCH BOARD
1983
Guidelines for the management of highway runoff on wetlands
National Cooperative Highway Research Program Report 264.
166 pp.

USA
management, scientific

Addresses the feasibility of using certain wetland types for mitigating the effects of highway runoff on wetlands. Provides extensive bibliography with entries grouped in major subject areas.

conservation, fauna, wetlands

OS:562

TRANSPORTATION RESEARCH BOARD
1973
Erosion control on highway construction
National Cooperative Highway Research Program,
Synthesis of Highway Practice 18. 52 pp.

USA
management

Appendix D outlines in table form the various erosion control practices and their advantages and problems.

construction, soil erosion

AU:563

TREVASKIS D
1986
Local powerlines versus trees- a constant conflict
Tree Society Review. pp 2,6

Australia
management

Discussed conversion to partial undergrounding of power lines on Sydney's suburban Pennant Hills Road; aboricultural training by tree-trimming gangs; and the use of aerial bundle conductors in Brisbane.

planning, road safety

OS:564

TRITENBACH P
1977
Farming the weeds in New Zealand. An ecological approach to highway landscape design
Landscape Archit. 67(2), 157-161

NZ
management

Traces the 3-layer overall concept in motorway landscaping from 1973: uniformity of construction, individualised colour planting, attention to visual nodes.

history, landscape

AU:565

TURNER AK
1957
The control of roadside erosion
Soil Conservation Authority of Victoria, Australia. 57 pp.

Victoria
management

Deals with causes and remedies for roadside erosion. Vegetation valuable for soil stabilisation. Cooperation between landholders and engineers essential. Erosion control structures should be part of overall conservation scheme.

construction, soil erosion

WA:566

TURNER JM
1983
Assessment of road verges for weediness and plant life forms
Mulga Research Centre, Biology Department, WAIT

Western Australia
management

not seen

assessment, weed

AU:567

TYDENS NM
1985
Herbicide application: guidelines for roadside management
In: Managing roadside vegetation: what part do herbicides play? Paper from a workshop & fieldday at Ballarat College of Advanced Education. Roadsides Conservation Committee. pp 15-19

Victoria
management

Guidelines for the use of the herbicide roundup.

herbicide

AU:568

TYLER K
1974
Planning policy in relation to highways
In: Forum on roadsides and conservation. Proceedings of a conference held by VNPA, NRCL, CCV and TCPA.

Australia
management

Discusses government policy regarding highways and land use as laid down in the official Statement of Planning Policy No. 5 (Highway areas), 1973.

legislation, planning

OS:569

UNDERWOOD CV
1969
Management of verges
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
management

Management of road verges from the point of view of the engineer.

herbicide, mowing

OS:570

VAN LEEUWIN BH
1982
Protection of migrating common toad (Bufo bufo) against car traffic in the Netherlands
Environ. Conserv. 9(1), 34

Netherlands
management

Details the kind of protective action taken and the extent of public involvement.

conservation, fauna, road-kill

OS:571

VAN DER ZANDE AN, TER KEURS WJ & VAN DER WEIJDEN WJ
1980
The impact of roads on the densities of four bird species in an open field habitat - evidence of a long-distance effect
Biological Conservation 18(4), 299-321

Netherlands
scientific

Densities of several bird species were up to 60% lower up to about 600m from a quiet rural road and 1800m from a busy highway.

birds, corridor, fauna, pollution

AU:572

VENNING J
1988
Growing trees for farms, parks and roadsides
Lothian Publishing Co. Pty Ltd, Melbourne. 126 pp.

Victoria
management, scientific

A handbook which aims to satisfy the demand for a practical, cost effective methodology for revegetation. Deals with planning, species selection, seed collection, site preparation, direct seeding, planting and natural regeneration.

fertiliser,fire,germination,grazing,herbicide,planting

AU:573

VESTJENS WJM
1973
Wildlife mortality on a road in New South Wales
Emu 73, 107-112

New South Wales
scientific

Survey found 87 species killed, 1 bird (mainly magpies) every 13km; 1 mammal (mainly rabbits) every 30km & 1 reptile (mainly Common Bearded Dragons) every 176km. No rare or endangered species killed. Most birds killed spring,summer.

fauna, road-kill

OS:574

VICKERS JC & ZAK JM
1978
Effects of pH, P, and Al on the growth and chemical composition of crownvetch
Agron. J. 70(5), 748-751

USA
scientific

It was found that optimum Al and Mn levels combined with enhanced Ca and P availability benefitted growth of Coronilla varia (crownvetch).

lead, pollution, salinity

AU:575

VICTORIAN INDIGENOUS SEED COLLECTION & PROPAGATION SERVICE
1984
Direct seeding of floristic communities
In: At Ground Level - a workshop on restoring local vegetation. Roadsides Conservation Committee/ Department of Conservation, Forests and Lands. La Trobe University, Victoria

Victoria
general, management

Advantages and disadvantages of direct seeding native species compared with planting, and recommended site pre-treatments

genetics, native flora, seeding

AU:576

VICTORIAN NATIONAL PARKS ASSOCIATION ET AL
1974
Forum on roadsides and conservation
Proceedings of a conference held by the Victorian National Parks Association, Natural Resources Conservation League and Town & Country Planning Association.

Victoria
management

11 papers on roadside conservation and planning.

conservation, planning

AU:577

VINES R
1984
Eucalypt and wattle regeneration from direct seeding operations: its potential for establishment
In: At Ground Level - a workshop on restoring local vegetation. Roadsides Conservation Committee/ Department of Conservation, Forests and Lands. La Trobe University, Victoria

Victoria
general

Nothing to do with title; discusses tree decline in Victoria and how management of roadside vegetation must be integrated with that of surrounding landscape.

conservation, landscape, planning

OS:578

VOORHEES LD & CASSEL JF
1980
Highway right-of-way mowing versus succession as related to duck nesting
Journal of Wildlife Management 44(1), 155-163

USA
management, scientific

Unmowed vegetation provides cover for waterfowl. However if left unmowed for long, duck nest success declines due to increased predation. Recommends early stage of succession is best, maintained by 3-year rotational mowing.

birds, fauna, mowing, succession

AU:579

WACE NM
1977
Assessment of dispersal of plant species - the car-borne flora in Canberra
In: Anderson D (Ed.) Exotic species in Australia- their establishment and success. Proceedings of the Ecological Society of Australia 10, 167-186

Australian Capital Territory
scientific

Car-borne flora includes a wide range of natives and exotics from all kinds of local habitats, plus some from further afield. Discusses implications for quarantine and weed control.

weed, weed control

OS:580

WADE KJ, FLANAGAN JT, CURRIE A & CURTIS DJ
1980
Roadside gradients of lead and zinc concentrations in surface-dwelling invertebrates
Environmental Pollution, Series B, 1(2), 87-93

UK
scientific

Samples of soil, vegetation and invertebrates taken along 6 transects perpendicular to major roads. Levels of lead and zinc decreased with distance from road in all samples except invertebrate zinc, not influenced by proximity to road.

pollution, lead, invertebrate

OS:581

WAKEFIELD RC, BELL RS, JAGSCHITZ, CLAPHAM AJ & LASKEY BC
1976
Establishment of roadside vegetation in Rhode Island Agricultural Experiment Station. Bulletin 416. 36 pp.

USA
scientific

Experiments with seed mixtures and methods for establishment, like soil type, grass and legume species in various combinations, mulches and seed bed fertilisers.

fertiliser, seeding

OS:582

WAKEFIELD RC, FALES SL, NIELSON AP & KYLE WG
1979
Establishment of woody plants in the roadside environment
Agricultural Experiment Station, URI College of Resource Devt. Bulletin 425. 85 pp.

USA
scientific

The results of research on woody species adapted to droughty, infertile soils and a range of treatments to enhance growth (soil amendment, anti-transpirant sprays and competing grasses).

biological control, fertiliser, landscape, planting

OS:583

WAKEFIELD RC, SAWYER CD & LOWE BA
1981
Management and renovation of roadside turf grasses
Agricultural Experiment Station, University of Rhode Island, College of Resource Devt. Bulletin 431. 50 pp.

USA
scientific

Results of experiments with fertiliser, mowing, application of sewage sludge and weed control.

fertiliser, mowing, weed control

OS:584

WALCOTT CF
1974
Changes in bird life in Cambridge, Massachusetts from 1860 to 1964
Auk 91(1), 151-160

USA
scientific

Discusses changes in bird life on two originally similar 6-acre tracts from 1860-1964. Effects of urbanisation including city streets and plantings noted, effects of two exotic bird species and effects of insecticides discussed.

birds, fauna

WA:585

WALDEN JF
1979
Operation and rehabilitation of borrow pits
Main Roads Department, WA. 20 pp.

Western Australia
management

Procedures for constructing and rehabilitating borrow pits for conservation of vegetation and topsoil.

construction, rehabilitation

WA:586

WALDEN JF
1982
Conservation and regeneration techniques
Main Roads Department, WA

Western Australia
management

Conservation and regeneration of native flora during and after road building, dam construction, quarrying and on discarded land. Contains principles directly applicable to planning and construction personnel.

construction,fire,native flora,rehabilitation,soil erosion

WA:587

WALDEN JF
1982
Planting road verges
In: Trees in the rural landscape: Proceedings of a conference held in Perth, WA, October 1981 by the Department of Conservation and Environment, Department of Agriculture, and Forests Department, WA. pp 171-176

Western Australia
management

Summarises Main Roads Department techniques for replanting road verges for native flora conservation.

native flora, planting, rehabilitation

WA:588

WALDEN JF
1974
Landscape and conservation on road verges
Main Roads Department, WA. 17 pp.

Western Australia
general, management

Principles of conservation of native flora and landscaping of road verges during construction and maintenance.

construction, landscape, native flora, rehabilitation

AU:589

WALLACE G
1985
The role of native vegetation in fire prevention and control
In: Managing roadside vegetation: what part do herbicides play? Paper from a workshop and fieldday at Ballarat College of Advanced Education. Roadsides Conservation Committee.
pp 23-28

Victoria
management

Managed vegetation can provide a valuable firebreak in itself when its form and arrangement is continuous, reduces windspeed at ground level, intercepts burning material that is airborne and absorbs radiated heat.

fire

AU:590

WALLING E
1985
Country roads: the Australian roadside
First published 1952, Oxford University Press; now published 1985, Pioneer Design Studio, Victoria

New South Wales, Victoria
general

An early look at roadside vegetation. Mostly a photographic record of roadsides in eastern Australia, with notes on roadside ecology and suggestions for planting.

landscape, native flora

AU:591

WALLING E
1966
The roadside destruction
Wildlife in Australia 3(3), 92-93

Victoria
general

Reasons for retaining natural vegetation on country roadsides.

conservation

AU:592

WALTER R
1983
Roadsides belong to everyone and no-one
Trees and Victoria's Resources 25(1), 10-11

Australia
general, management

Discusses problems resulting from fragmentation in management and responsibility. Discusses stages of formulating a management plan to deal with roadside conservation.

legislation, planning

OS:593

WARD NI, BROOKS RR & REEVES RD
1974
Effect of lead from motor-vehicle exhausts on trees along a major thoroughfare in Palmerston North, New Zealand
Environmental Pollution 6, 149-158

New Zealand
scientific

Analysis of lead levels in trees along a highway in Palmerston North, New Zealand. Lead distribution was affected by the prevailing wind and the side of the tree sampled.

lead, pollution

OS:594

WARD NI, BROOKS RR & ROBERTS E
1978
Lead levels in sheep organs resulting from pollution from automotive exhausts
Environmental Pollution 17, 7-12

New Zealand
scientific

Study of lead levels in organs of sheep: grazed near highways; fed contaminated grass; exposed to car exhaust but fed uncontaminated grass. Inhalation produced high conc. in lungs, consumption high concentration in kidney and liver.

lead, pollution, sheep

OS:595

WARD NI, REEVES RD & BROOKS RR
1975
Lead in soil and vegetation along a New Zealand state highway with low traffic volume
Environmental Pollution 9, 243-251

New Zealand
scientific

Study of lead distribution in soil as function of distance from highway and soil depth, and content in vegetation, along a highway passing through an uninhabited area of New Zealand.

lead, pollution

OS:596

WARNER RE
1983
An adoption model for roadside habitat management by Illinois farmers
Wildlife Society Bulletin 11(3), 238-249

USA
management, scientific

Model deals with how new ideas or innovations are adopted and spread through community (eg agricultural). Paper applies it to voluntary reserve conservation, particularly roadside management for pheasants in Illinois.

conservation

OS:597

WARNER RE & JOSELYN GB
1986
Responses of Illinois ring-necked pheasant populations to block roadside management
Journal of Wildlife Management 50(4), 525-532

USA
management, scientific

The effects of roadside management were such that the boom phase in regional pheasant trends was amplified, and subsequent declines related to land use and severe winters were moderated.

birds, conservation

AU:598

WATSON K
1987
Roadside management plans, their development and use
In: Roadsides conservation "asset or liability?"
Proceedings of a seminar held in Wodonga by the Wodonga Land Protection Regional Advisory Committee, Roadsides Conserv. Committee & Dept Conserv. For. & Lands (NE Region)

Victoria
management

not seen

planning

OS:599

WAY JM
1977
Roadside verges and conservation in Britain: a review
Biological Conservation 12(1), 65-74

UK
management, scientific

Description of UK work assessing conservation value of roadside verges. Stresses importance of liaison between conservation and highway authorities.

conservation, fauna, mowing, weed control

OS:600

WAY JM
1973
Road verges on rural roads: management and other factors
Monks Wood Experimental Station, Natural Environment Research Council. Occasional Reports No. 1. 67 pp.

UK
management

Discusses functions of road verges and management policies and practices of 58 counties in England and Wales. Management discussed in terms of engineering and safety, amenity, weed control, conservation and public relations.

conservation, mowing, planting, pollution, weed control

OS:601

WAY JM
1976
Grassed and planted areas by motorways
Monks Wood Experimental Station, The Institute of Terrestrial Ecology, Natural Environment Research Council, Occasional Reports No. 3. 92 pp.

UK
management

Extent, function and management of grassed and planted areas by motorways in England and Wales. Discusses planting, management and pollution as they relate to wildlife conservation.

conservation, mowing, planting, pollution

OS:602

WAY JM
1969
Road verges - research on management for amenity and wildlife
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
management

Summary of Nature Conservancy work - management experiments, survey work on structure and flora of verges, and cataloging sites of especial interest.

conservation, fauna, herbicide, mowing

OS:603

WAY JM
1967
Roadside verges and the conservation of wildlife
Journal of the Devon Trust 12, 483-486

UK
management

Points out the value of roadside verges to wildlife and discusses some management practices and their effects.

conservation, herbicide, mowing

OS:604

WAY JM
1974
Co-operation for conservation of rural road verges
Monks Wood Experimental Station, Natural Environment Research Council, Occasional Reports No. 2. 179 pp.

UK
management

Collates information from county Highway Departments, regional officers of the Nature Conservancy and the County Naturalists' Trusts to summarise England & Wales involvement in management for wildlife in roadside maintenance policies.

conservation

OS:605

WAY JM
1970
Roads and the conservation of wildlife
Journal of the Institution of Highway Engineers 17(7), 5-11

UK
management

Discusses reasons for management, particularly in relation to safety, amenity, weed control and wildlife, & experiments on management methods using machines or chemicals. Characteristics of road verges and factors affecting management.

fauna, herbicide, road safety, weed control

OS:606

WAY JM (ED.)
1969
Road verges: their function and management
Proceedings of a symposium held in London on 14 March 1969. The Nature Conservancy, Monks Wood Experimental Station. 52 pp.

UK
management, scientific

11 papers dealing with aspects of road verge conservation and management.

conservation, fauna, mowing, weed control

OS:607

WEGNER JF & MERRIAM G
1979
Movements by birds and small mammals between a wood adjoining farmland habitats
Journal of Applied Ecology 16, 349-357

Canada
scientific

Fencerows provide corridors into and out of wood for small mammals. Birds also channelled along fencerows, seldom moving across open fields.

birds, corridor, fauna, small mammal

OS:608

WELCH WR & DICK DL
1975
Lead concentrations in tissues of roadside mice
Environmental Pollution 8, 15-21

USA
scientific

Lead concentrations in soil were related to proximity to highway but not to traffic volume. Accumulation of lead in mouse liver, kidney & bone, but not in brain, lung, stomach & muscle, related to both traffic volume & proximity to road

lead, fauna, pollution

AU:609

WESTBROOKE M
1985
Roadside values and conflicts
In: Managing roadside vegetation: what part do herbicides play? Paper from a workshop and fieldday at Ballarat College of Advanced Education. Roadsides Conservation Committee.
pp 1-4

Victoria
management

Briefly considers full range of management considerations for roadside reserves.

conservation, planning

OS:610

WESTER L & JUVIK JO
1983
Roadside plant communities on Mauna Loa, Hawaii
Journal of Biogeography 10, 307-316

USA
scientific

Mowed verge was rich in species but mostly aliens, while zone between road verge and lava flows had progressively more native species further away from road. Species compositon of road verges varied gradually with altitude.

corridor, mowing, native flora, weed

OS:611

WESTERN STATES LANDSCAPE ASSOCIATES
1972
Roadside development, evaluation of research
National Cooperative Highway Research Program Report No. 137
Highway Research Board, Washington DC. 78 pp.

USA
management

Evaluation of research done and research needed. Covers highway location and design, roadside space, resource conservation, motorist services, erosion control, planting, roadside maintenance, organization and administration.

conservation, planting, soil erosion

OS:612

WHITE DB & BAILEY TB
1968
Vegetation maintenance practices, programs and equipment on Minnesota highways
Agricultural Experimental Station, University of Minnesota. Investigation 619. 69 pp.

USA
management

Recommendations resulting from analysis of the findings of a review of the vegetative phase of maintenance programmes and practices in Minnesota. Details of turf maintenance are included.

mowing, weed control

OS:613

WHITE RJ
1969
Road verges - Hampshire NFU experience in 1968
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
management

Hampshire farmers' reaction to County Council decision not to mow verges - opposition based on safety and weed control arguments.

mowing

OS:614

WICKERN M & BRECKLE S-W
1983
Lead in oakwood trunks from highway margins
Ber. Dtsch. Bot. Ges. 96(2-3), 343-350

Germany
scientific

Studied the lead content of xylem rings of oak trees with a view to assessing the effect of German gasoline lead laws of 1972/1976.

lead, legislation, pollution

OS:615

WILCOX DA
1986
The effects of deicing salts on water chemistry in Pinhook Bog, Indiana
Water Resour. Bull. 22(1), 57-65

USA
scientific

Records the salt concentration over 5 year period. Analysis of salt movements suggests that vertical transport by water movement was responsible for concentration changes.

salinity

OS:616

WILKINS KT
1982
Highways as barriers to rodent dispersal
Southwest. Nat. 27(4), 459-460

USA
scientific

A study of 10 species in SE Texas provides information useful in designing demographic studies and understanding the potential of highways in fragmenting gene pools.

genetics, small mammal

OS:617

WILLIAMSON P
1980
Variables affecting body burdens of lead, zinc and cadmium in a roadside population of the snail Cepaea hortensis
Oecologia (Berl.) 44(2), 213-220

UK
scientific

Discusses variables affecting lead, zinc and cadmium levels in snail tissue. Lead levels fluctuated rapidly, zinc exchanged slowly & cadmium immobile, accumulating with age. Monitoring heavy metal pollution with snails may be possible

fauna, lead, pollution

OS:618

WILLIAMSON P
1979
Comparison of metal levels in invertebrate detritivores and their natural diets: concentration factors reassessed
Oceologia 44(1), 75-79

UK
scientific

Factors other than seasonal changes in metal levels of senescent vegetation are primarily responsible for within-site variation in the lead, zinc and cadmium concentrations of invertebrate detritivores.

invertebrate, lead, pollution

OS:619

WILLIS AJ
1969
Road verges - experiments on the chemical control of grass and weeds
In: Way JM (Ed.) Road verges: their function and management. Proceedings of a symposium, The Nature Conservancy, Monks Wood Experimental Station.

UK
management, scientific

Results of experimental spraying programme in Gloucester from 1958 onwards, using maleic hydrazide and 2,4-D.

herbicide, weed control

AU:620

WILLIS JH
1974
Roadside flora values
In: Forum on roadsides and conservation. Proceedings of a conference held by VNPA, NRCL, CCV and TCPA.

Victoria
management

Discusses briefly the practical, scientific and aesthetic value of vegetation on roadsides.

native flora

AU:621

WILLIS JH
1976
Conservation of genetic material on roadsides
Paper presented at the 32nd Conference of Municipal Engineers. Country Roads Board, Melbourne, Victoria.

Victoria
management

not seen

conservation, genetics, native flora

OS:622

WILSON CC
1979
Roadsides - corridors with high fire hazard and risk
Journal of Forestry 77, 576-577, 580

USA
management

Fuel hazard reduction should concentrate on first 10 feet of roadside;methods include machine and hand-clearing,chemicals and prescribed burns. Describes fuel reduction projects in 2 national forests: roadside treatment reduced fire incidence.

fire

WA:623

WINCHCOMBE J & GALVANS IJ
1988
Revegetation and rehabilitation of roadside flora in Narrogin division
Western Roads 13(1), 4-8

Western Australia
management

Documents the efforts made in the Narrogin area since 1972 to reafforest widened road reserves.

fire, planting, rehabilitation, weed control

OS:624

WISTRAND G
1976
The artificially sown roadbanks along the Graddis road, N Sweden
Svensk Bot. Tidskr. 70(2), 155-163

Sweden
scientific

Documents the results of sowing mixed grass seed along roadbanks in a high mountain area. The patterns of associated weed growth are observed.

seeding, weed

OS:625

WITMER GW & DE CALESTA DS
1985
Effect of forest roads on habitat use by Roosevelt elk
Northwest Sci.59(2), 122-125

USA
management, scientific

Concludes that the effect of roads on elk use of habitat may be mitigated by a system of road closures.

fauna

OS:626

WRIGHT DL, PERRY HD & BLASER RE
1978
Persistent low maintenance vegetation for erosion control and aesthetics in highway corridors
In: Schaller FW & Sutton P (Eds). Reclamation of Drastically Disturbed Lands. American Society for Agronomy, Madison

USA
management

not seen

landscape, soil erosion

OS:627

WRIGHT DL, PERRY HD, GREEN JT JR & BLASER RE
1975
Manual for establishing a vegetative cover in highway corridors of Virginia
Virginia Department of Highways and Transportation. 73 pp.

USA
management

Brings together factors and principles involved in grading, soil preparation and establishing vegetation to minimize erosion and downstream pollution from new and old construction sites.

fertiliser, seeding, soil erosion

OS:628

WU L & ANTONOVICS J
1976
Lead tolerance in Plantago lanceolata and Cynodon dactylon from a roadside
Ecology 57(1), 205-208

USA
scientific

Lead level at roadside was high enough to impose selection pressure for the evolution of tolerance in a sensitive sp, but no overt effect was seen in a sp with a greater inherent tolerance.

lead, pollution

OS:629

YAPP WB
1973
Ecological evaluation of a linear landscape
Biological Conservation 5, 45-47

UK
management

Describes a simple numerical method of assessing the ecological damage likely to be done to a landscape by a linear feature such as a new road.

assessment, construction

OS:630

YOUSEF YA, WANIELISTA MP, HARPER HH & SKENE ET
1983
Impact of bridging on flood plains
In: Wetlands, floodplains, erosion, and storm water pumping, Transportation Research Record 948, 26-30

USA
management

At all sites surveyed there were more individuals of common plant species in bridge areas than in control areas. Bridge areas, however, appeared to be dominated by fewer species than control areas.

lead, pollution, soil erosion

AU:631

YUGOVIC JZ, ALLAN MJ & GOWANS RM
1985
Conservation resources on private land and roadside reserves in the Shire of Winchelsea, Victoria
Arthur Rylah Institute for Environmental Research, Technical Report Series No. 20

Victoria
management

Describes and assesses conservation resources on private land and roadside reserves for shire council decision-making Recommends three broad levels of planning response for sites of different conservation significance.

assessment, planning

OS:632

ZACKS JL
1986
Do white-tailed deer avoid red? An evaluation of the premise underlying the design of swareflex wildlife reflectors
In: Roadside design and management,
Transportation Research Record 1075, 35-43

USA
management, scientific

It is argued that, where they are effective, the reflectors may have influenced the behaviour of the drivers rather than the behaviour of the deer.

fauna, road-kill

OS:633

ZAJIC JE & SVRCEK WY
1975
Environmental impact statement preparation
J. Environ. Syst. 5(2), 115-120

Canada
management

A procedure is presented which allows the evaluation of the effects of road system construction on the environment.

assessment, planning

OS:634

ZAK JM
1983
Vegetation of roadside slopes in Massachusetts
Transportation Research Record 913, 11-14

USA
management

Discusses research on establishment of roadside vegetation and sand-dune control from 1962-1977. Discusses species, mulches and methods of establishing woody species by root cuttings and spot seeding, & machine planting of beachgrass.

planting, seeding, soil erosion

OS:635

ZUCCA CP
1982
The effects of road construction on a mangrove ecosystem
Trop. Ecol. 23(1), 105-124

USA
management

Construction of a sewage access road in Peurto Rico caused soil to be placed in such a location as to prevent tidal input which resulted in the death of mangrove trees.

construction