

FIELD DAY NOTES

ON

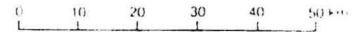
SITE VEGETATION MAPPING IN THE NORTHERN JARRAH FOREST

DWELLINGUP, JUNE 1986

GENERAL WORKING PLAN No. 87
SOUTH-WEST CATCHMENTS



SCALE 1:1 000 000

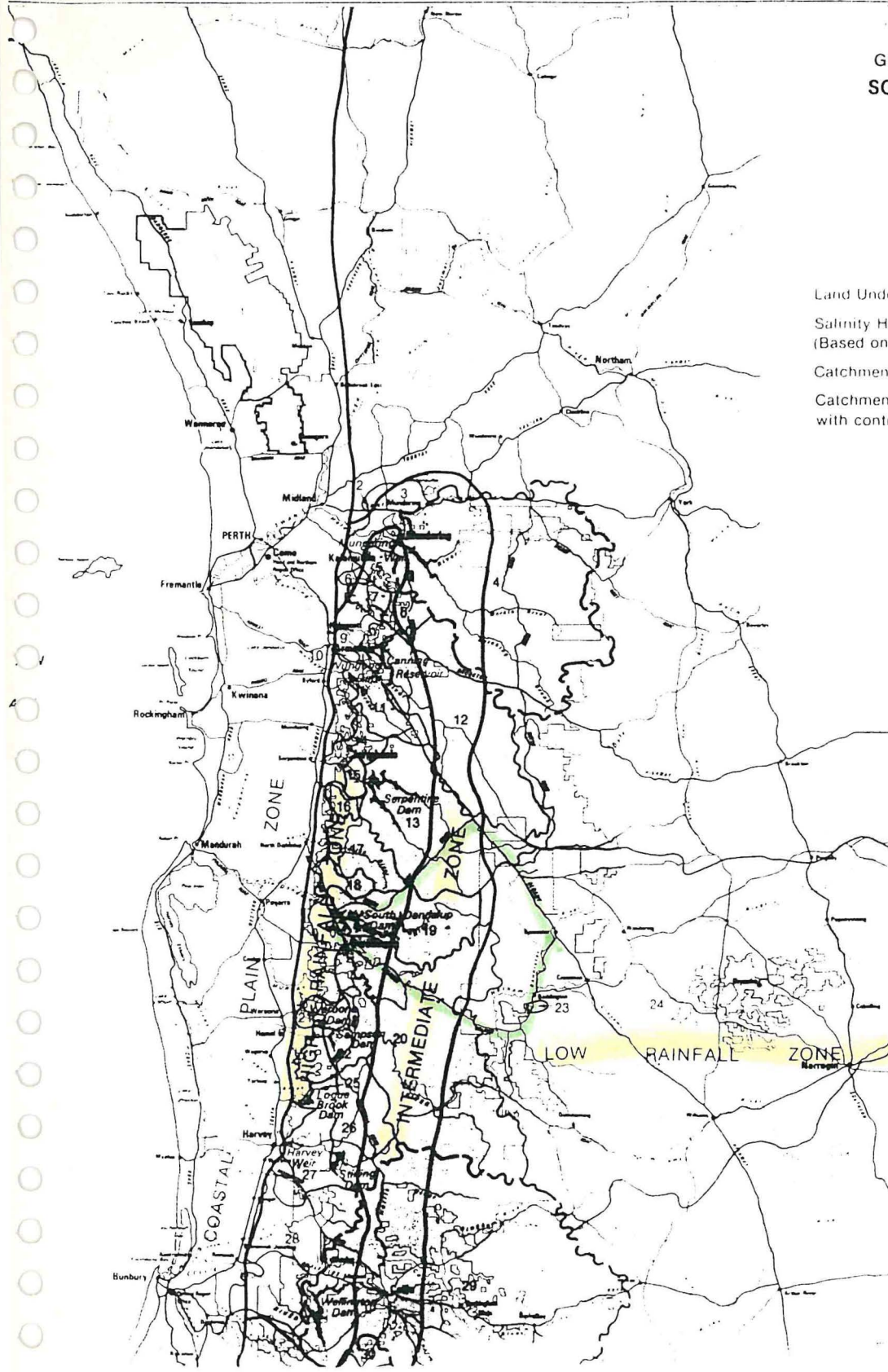


LEGEND

- Land Under Control of Conservator of Forests
- Salinity Hazard Zones --- (Based on Sadler & Williams)
- Catchment Boundaries
- Catchment Boundaries— with controls on clearing

Catchments

1. Grandara Water Reserve
2. Deep Glen Brook
3. Jane Brook
4. Helena River
5. Lower Helena
6. Bickley Upper and Lower
7. Victoria
8. Kangaroo Gully
9. Churchman Brook
10. Neerigen
11. Wungong Brook
12. Canning
13. Serpentine
14. Lower Serpentine
15. Serpentine Pipetoad
16. Dirk Brook
17. North Dandalup
18. Little Dandalup
19. South Dandalup
20. Murray River Water Reserve
21. Waroona
22. Samson
23. Boddington
24. Murray
25. Logue Brook
26. Stirling
27. Harvey
28. Collie River
29. Wellington
30. Glen Mervyn
31. Preston River
32. Kirup
33. Balingup
34. Dumpling Gully
35. Millstream
36. Hester
37. Tanjanerup
38. Margaret River
39. Blackwood River
40. Donnelly River
41. Phillips Creek
42. Manmap
43. Warren River
44. Gardner River
45. Shannon River
46. Deep River
47. Frankland River
48. Kent River
49. Denmark River
50. Hay River



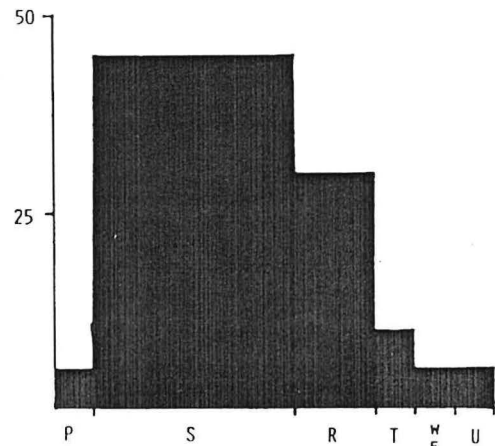
HAVEL SITE VEGETATION MAPPING

HIGH-INTER RAINFALL A, B, G, R, U, Q, C, D, O, P, S, T, W

INTER-LOW RAINFALL F, J, G, A, B, E, C, H, Z

WANDOO FOREST L, M, Y

SUBTLE IMPACT

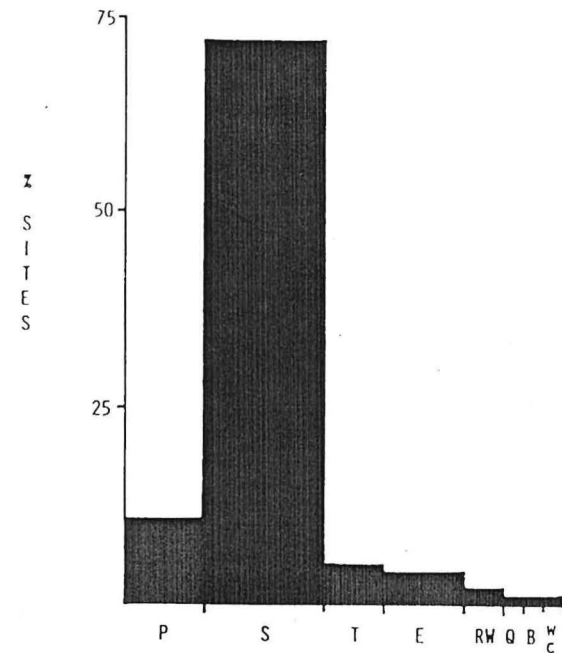


S - 4
 RS - 2
 WS - 1
 PS - 1
 TS - 1

R - 5
 ER - 1

HAVEL SITE TYPE

MODERATE IMPACT



P-6
 HP-3
 SP-1
 ZP-1

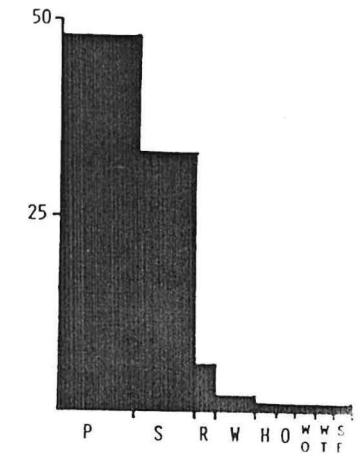
S-40
 TS-19
 PS- 8
 RS- 2
 WS- 1
 CS- 1

T-2
 ST-2
 WT-2

E-1
 WE-1
 SE-1
 ZE-1

HAVEL SITE TYPE

HIGH IMPACT



P-17
 WP-5
 SP-3
 RP-1

S-11
 PS-5
 WS-2

W-1
 PSW-1

HAVEL SITE TYPE

SITE TYPE "U"

MAIN GROUNDSTOREY INDICATORS

Leucopogon verticillatus
Pteridium esculentum
Chorizema ilicifolium
Macrozamia riedlei
Clematis pubescens

MAIN TREE COMPONENTS - Mean Height 29m

Eucalyptus calophylla
Eucalyptus patens

UNDERSTOREY TREES

Some Banksia grandis
Persoonia longifolia

STRUCTURAL CLASSIFICATION

Dense forest to tall dense forest

RAINFALL ZONE

Over 1000mm

TOPOGRAPHICAL POSITION

Mid and lower slopes

SOIL

Brown sandy loam over clay loam at 40cm

FERTILITY

High

SITE TYPE "T"

MAIN GROUNDSTOREY INDICATORS

Leucopogon verticillatus
Pteridium esculentum
Clematis pubescens
Leucopogon propinquus

MAIN TREE COMPONENT - Mean Height 33m

Eucalyptus marginata
Eucalyptus calophylla

UNDERSTOREY TREES

Banksia grandis
Persoonia longifolia

STRUCTURAL CLASSIFICATION

Open forest to tall open forest

RAINFALL ZONE

Over 1000mm

TOPOGRAPHICAL POSITION

Upper slopes

SOIL

Orange to brown gravel with sandy loam to loam matrix, in a few marginal cases loam with medium gravel

FERTILITY

High

SITE TYPE "S"

MAIN GROUNDSTOREY INDICATORS

Adenanthos barbigera
Leucopogon capitellatus
Leucopogon propinquus
Lasiopetalum floribundum

Hovea chorizemifolia
Phyllanthus calycinus
Leucopogon verticillatus

MAIN TREE COMPONENT - Mean Height 30m

Eucalyptus marginata
Eucalyptus calophylla

UNDERSTOREY TREES

Banksia grandis
Persoonia longifolia

STRUCTURAL CLASSIFICATION

Open forest to tall open forest

RAINFALL ZONE

Upper slopes, ridges and plateaus

SOIL

Yellow to orange heavy lateritic gravel with loamy sand matrix

FERTILITY

Average

SITE TYPE "Z"

MAIN GROUNDSTOREY INDICATORS

Leucopogon capitellatus
Hakea lissocarpha
Styphelia tenuiflora

Macrozamia reidley
Phyllanthus calycinus
Leptomeria cunninghamii

MAIN TREE COMPONENTS - Mean Height 24m

Eucalyptus marginata
Eucalyptus calophylla

UNDERSTOREY TREES

Generally absent

STRUCTURAL CLASSIFICATION

Woodland to open forest

RAINFALL ZONE

Below 1000mm

TOPOGRAPHICAL POSITION

Upper slopes and ridges

SOIL

Grey brown loamy sands to sandy loam with moderate to heavy admixture of lateritic gravel, frequently over base of gravel in clay matrix

FERTILITY

Average

SITE TYPE "Y"

MAIN GROUNDSTOREY INDICATORS

Hakea lissocarpa
Hypocalymma angustifolium
Mesomelaena tetragona
Baeckea camphorosmae
Dampiera alata
Gastrolobium calycinum

MAIN TREE COMPONENT - Mean Height 27m

Eucalyptus wandoo

UNDERSTOREY TREES

Generally absent

STRUCTURAL CLASSIFICATION

Woodland to open forest

RAINFALL ZONE

Below 1000mm

TOPOGRAPHICAL POSITION

Lower slopes and valley floors

SOIL

Yellow-grey sandy loam to sandy clay over pale yellow or grey sandy clay at varying depths

FERTILITY

Average

SITE TYPE "G"

MAIN GROUNDSTOREY INDICATORS

Grevillea bipinnatifida
Casuarina humilis
Hakea lissocarpa
Petrophile striata

MAIN TREE COMPONENT

Eucalyptus laeliae
Casuarina hugeliana
Eucalyptus calophylla

UNDERSTOREY TREES

Generally absent

STRUCTURAL CLASSIFICATION

Complex from bare rock to woodland

RAINFALL

Not dependent on rainfall

TOPOGRAPHICAL POSITION

Steep slopes

SOIL

Stoney sandy loam

FERTILITY

N/A

SITE TYPE "J"

MAIN GROUNDSTOREY INDICATORS

Conospermum stoechadis
Hibbertia polystachya
Mesomelaena tetragona
Daviesia pectinata
Hakea ruscifolia
Leptocarpus scariosus

MAIN TREE COMPONENTS - Mean height 21m

Eucalyptus marginata
Eucalyptus calophylla

UNDERSTOREY TREES

Banksia attenuata
Nuytsia floribunda

STRUCTURAL CLASSIFICATION

Woodland to open forest

RAINFALL ZONE

Below 1000mm

TOPOGRAPHICAL POSITION

Lower slopes

SOIL

Deep pale yellow-grey sand, frequently underlain by lateritic gravel
in sandy clay matrix at depth

FERTILITY

Poor

SITE TYPE "H"

MAIN GROUNDSTOREY INDICATORS

Daviesia pectinata
Styphelia tenuiflora
Hakea cyclocarpa
Lepidosperma angustatum
Isopogon dubius

MAIN TREE COMPONENTS - Mean Height 25m

Eucalyptus marginata
Eucalyptus calophylla

UNDERSTOREY TREES

Some Casuarina fraseriana
Banksia grandis

STRUCTURAL CLASSIFICATION

Open forest

RAINFALL ZONE

Below 1000mm

TOPOGRAPHICAL POSITION

Slopes and plateaus

SOIL

Yellow-grey sand or loamy sand into lateritic gravel at depth merging into lateritic gravel at depth

FERTILITY

Poor

SITE TYPE "A"

MAIN GROUNDSTOREY INDICATORS

Hakea varia
Melaleuca viminea
Leptospermum ellipticum

Mesomelaena tetragona
Hypocalymma angustifolium
leptocarpus scariosus

MAIN TREE COMPONENTS - Mean Height 19m

Eucalyptus rudis
Melaleuca preissiana
Banksia littoralis

UNDERSTOREY TREES

Generally absent

STRUCTURAL CLASSIFICATION

Complex tall shrubland to low open forest

RAINFALL ZONE

Below 1000mm

TOPOGRAPHICAL POSITION

Valleys and depressions

SOIL

Grey sand over pale yellow or pale brown sand, often clay or organic-iron hardpan at depth

FERTILITY

Poor

SITE TYPE "E"

MAIN GROUNDSTOREY INDICATORS

Mesomelaena tetragona
Leptocarpus scariosus
Synaphea petiolaris
Baeckea camphorosmae
Dampiera alata
Hypocalymma angustifolium
Kingia australia

MAIN TREE COMPONENT - Mean Height 23m

Eucalyptus marginata
Eucalyptus calophylla

UNDERSTOREY TREES

Some Banksia grandis

STRUCTURAL CLASSIFICATION

Open forest

RAINFALL ZONE

Below 1000mm

TOPOGRAPHICAL POSITION

Valleys and lower slopes

SOIL

Grey, yellow or brown sands and loamy sands with admixture of lateritic gravel which tends to increase with depth; orange mottling in subsoil

FERTILITY

Poor

SITE TYPE "P"

MAIN GROUNDSTOREY INDICATORS

Trymalium ledifolium
Grevillea wilsonii
Adenanthos barbigera

Styphelia tenuiflora
Lechenaultia biloba
Leucopogon oxycedrus

MAIN TREE COMPONENTS - Mean Height 29m

Eucalyptus marginata
Eucalyptus calophylla

UNDERSTOREY TREES

Casuarina fraserana
Banksia grandis
Persoonia elliptica
Persoonia longifolia

STRUCTURAL CLASSIFICATION

Open forest to tall open forest

RAINFALL ZONE

Over 750mm

TOPOGRAPHICAL POSITION

Mid and lower slopes

SOIL

Lateritic gravel with sand or loamy sand matrix, or sand with heavy gravel

FERTILITY

Below average

SITE TYPE "W"

MAIN GROUNDSTOREY INDICATORS

Hypocalymma angustifolium
Hakea lissocarpa
Synaphea petiolaris
Baeckea camphorosmae
Moomelaena tetragona

MAIN TREE COMPONENTS - Mean Height 27m

Eucalyptus marginata
Eucalyptus calophylla
Eucalyptus patens

UNDERSTOREY TREES

Banksia grandis
Banksia littoralis

STRUCTURAL CLASSIFICATION

Open forest

RAINFALL ZONE

Over 1000mm

TOPOGRAPHICAL POSITION

Lower slopes and valley floors

SOIL

Yellow-brown or orange-brown sandy loam to loams occasionally with lateritic gravel, especially in the subsoil

FERTILITY

Poor

SITE TYPE "M"

MAIN GROUNDSTOREY INDICATORS

Hakea lissocarpa
Macrozamia riedlei
Gastrolobium calycinum
Baeckea camphorosmae

MAIN TREE COMPONENTS - Mean Height 27m

Eucalyptus wandoo
Eucalyptus marginata
Eucalyptus patens
Eucalyptus accedens

UNDERSTOREY TREES

Generally absent

STRUCTURAL CLASSIFICATION

Woodland to open forest

RAINFALL ZONE

Below 1000mm

TOPOGRAPHICAL POSITION

Mid and upper slopes

SOIL

Brown sandy loam to loam over yellow or red-brown clay loam

FERTILITY

Above average

SITE TYPE "L"

MAIN GROUNDSTOREY INDICATORS

Hakea lissocarpa
Hibbertia lineata
Diplolaena microcephala var. drummondii
Hypocalymma angustifolium

MAIN TREE COMPONENTS - Mean height 28m

Eucalyptus wandoo
Eucalyptus patens

UNDERSTOREY TREES

Generally absent

STRUCTURAL CLASSIFICATION

Woodland to open forest

RAINFALL ZONE

Below 1000mm

TOPOGRAPHICAL POSITION

Lower slopes

SOIL

Brown silty loam over red-brown clay loam

FERTILITY

High

SITE TYPE "F"

MAIN GROUNDSTOREY INDICATORS

Stirlingia latifolia
Leptocarpus scariosus
Lyginia tenax
Caustis dioica

MAIN TREE COMPONENTS - Mean Height 20m

Eucalyptus marginata

UNDERSTOREY TREES

Generally absent - some Nuytsia floribunda

STRUCTURAL CLASSIFICATION

Open woodland to open forest

RAINFALL ZONE

Below 1000mm

TOPOGRAPHICAL POSITION

Lower slopes

SOIL

Coarse grey sand over yellow sand

FERTILITY

Poor

SITE TYPE "B"

MAIN GROUNDSTOREY INDICATORS

Mesomelaena tetragona
Adenanthos obovata
Dasypogon bromeliifolius
Leptocarpus scariosus

MAIN TREE COMPONENTS - Mean Height 21m

Eucalyptus marginata
Eucalyptus calophylla

UNDERSTOREY TREES

Banksia grandis

STRUCTURAL CLASSIFICATION

Low open forest

RAINFALL ZONE

Below 1000mm

TOPOGRAPHICAL POSITION

Valleys and depressions

SOIL

Light grey sand over grey to pale yellow sand, somewhat heavier texture and compaction in subsoil

FERTILITY

Poor

SITE TYPE "O"

MAIN GROUNDSTOREY INDICATORS

Bossiaea ornata
Dryandra nivea

MAIN TREE COMPONENT

Eucalyptus marginata
Eucalyptus calophylla

UNDERSTOREY TREES

Banksia grandis
Persoonia longifolia
Casuarina fraserana

STRUCTURAL CLASSIFICATION

Open forest to tall open forest

RAINFALL ZONE

Over 1000mm

TOPOGRAPHICAL POSITION

Mid and lower slopes

SOIL

Lateritic gravel

FERTILITY

Average

SITE TYPE "D"

MAIN GROUNDSTOREY INDICATORS

Hypocalymma angustifolium
Mesomelaena tetragona
Synaphea petiolaris
Kingia australis
Lepidosperma angustatum

MAIN TREE COMPONENT

Eucalyptus marginata
Eucalyptus calophylla
Eucalyptus patens

UNDERSTOREY TREES

Banksia littoralis
Some Banksia grandis

STRUCTURAL CLASSIFICATION

Open forest

RAINFALL ZONE

Over 1000mm

TOPOGRAPHICAL POSITION

Valleys and lower slopes

SOIL

Orange-brown loamy sands and sandy loam over sandy clay or secondary lateritic ironstone

FERTILITY

Poor

SITE TYPE "Q"

MAIN GROUNDSTOREY INDICATORS

Trymalium spathulatum
Chorizema ilicifolium
Macrozamia riedlei
Pteridium esculentum
Acacia extensa
Phyllanthus calycinus

MAIN TREE COMPONENTS - Mean Height 31m

Eucalyptus patens
Eucalyptus calophylla
Eucalyptus marginata

UNDERSTOREY TREES

Some Persoonia longifolia

STRUCTURAL CLASSIFICATION

Moderately tall and dense stand

RAINFALL ZONE

Over 1000mm

TOPOGRAPHICAL POSITION

Lower and mid slopes

SOIL

Dark brown sandy or silty loam over red-brown clay loam

FERTILITY

High