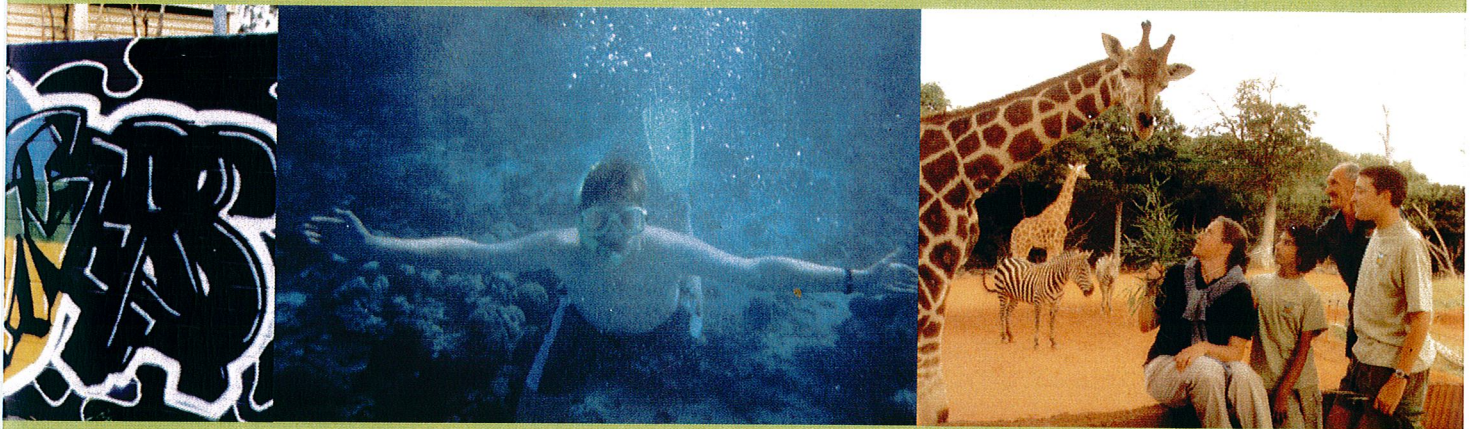


CALM BUSH RANGERS



ANNUAL REPORT 2001



CALM BUSH RANGERS

PART OF THE GREATER CONSERVATION COMMUNITY OF WESTERN AUSTRALIA ANNUAL REPORT 2001

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1 SUMMARY

From Broome to Albany and Coolgardie to Kalbarri, 1100 young people across WA are active voluntary participants in nature conservation in conjunction with their local communities.

Last year, the CALM Bush Rangers collectively contributed more than 180,000 hours to the study of nature conservation and special projects.

CALM Bush Rangers is a component of the Western Australian government program known as 'Cadets WA', which provides 13 to 17-year-olds with opportunities to develop life skills such as leadership and teamwork. Each 'Unit' chooses its conservation projects from a list compiled by the local community and Unit members. The community service projects have included harvesting termites for the numbat-breeding program at Perth Zoo, engaging in 'dieback' operations, completing mosaic control burns for property and biodiversity management, and compiling photographic essays of a marine park.

Other projects undertaken by CALM Bush Rangers range from carrying out germination trials of the rare *Eremophila viscida* in the mid-west region to eradicating the Sydney wattle, a weed that grows at Bull Creek. In an erudite move, the cadets have harvested the Sydney wattle as feed for giraffes at the Perth Zoo.

The impact of this program, now in its fourth year, has been positive. Young people from across WA have met by taking part in regional and State Bush Ranger conservation events. Bush Rangers are also now meeting virtually on the internet, designing and operating their websites. The program's National Accreditation is having an impact on Year 12 students who are now choosing tertiary studies and careers in natural resource management. Most importantly, many are instilled with an ethic of environmental responsibility and are continuing their volunteer work in nature conservation.

CALM Bush Rangers caters for young people with a range of physical and intellectual abilities from a variety of cultural backgrounds. Bush Rangers are encouraging young new immigrants to take part in diverse conservation activities. One Bush Ranger Unit's instructor has Downs Syndrome and children who are 'at risk' are achieving success in other areas after joining the Bush Rangers.

CALM Bush Rangers is a positive conservation and youth development program that provides a meaningful way for young people to offer their services to the community and for the community to reciprocate by recognising, valuing, supporting and encouraging them. As a by-product, everyone's appreciation of and contribution to biodiversity is enhanced.

CALM Bush Rangers expanded in 2001. Eight new Units were established with an increasing number of rangers joining each Unit. Several former Year 12 Bush Rangers returned to their Units to

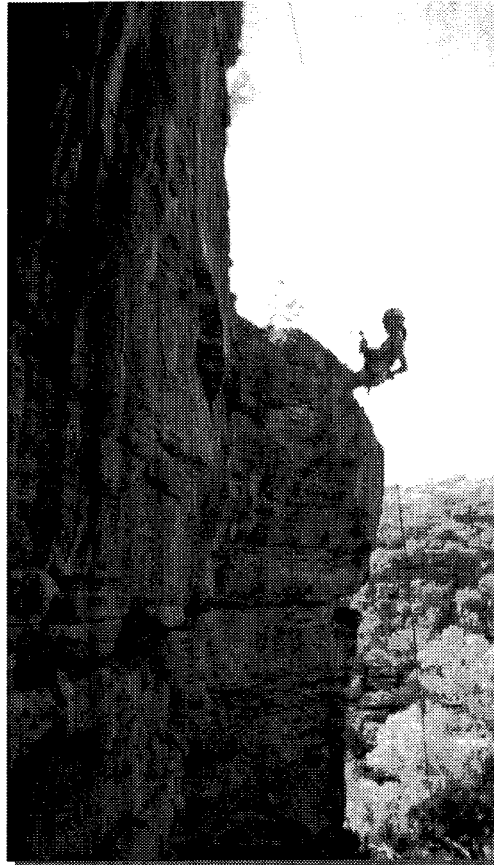


Year eight BushRanger Caitlyn Walker, of John Septimus Roe Anglican Community school with an orphaned tammar wallaby. Photograph courtesy of West Australian Newspapers Limited.

volunteer their services as adult instructors. The program is so popular that most Units have a waiting list, with membership being seen as a privilege.

CALM Bush Rangers represented WA at a variety of events and occasions, one of the most notable being an instructor and ranger representing Western Australia at the ANZAC Day dawn service at Gallipoli as part of the Spirit of ANZAC tour. Another 40 Bush Rangers were selected to sail in the inaugural Department of Conservation and Land Management-Leeuwin Ocean Adventure to complete a leadership certificate.

The Department of Conservation and Land Management offers a reward scheme to Bush Ranger cadets who've shown excellent commitment to their communities. The rewards include taking part in controlled burns at Dwellingup, Bunbury and Manjimup and conducting native fauna and flora research with the Department's scientists at the Perup Forest Ecology Centre near Manjimup in spring and autumn.



Communication is an important way of letting the community know about what CALM Bush Rangers are doing to protect biodiversity. Communication through the year took a variety of forms including:

- designing and painting an approved 'graffiti' Bush Rangers sign on a school wall,
- winning \$2000 from the City of Perth for having the best float in the Royal Show parade,
- creating a Bush Ranger cadet web-community,
- holding a Swan Region web-design day for 10 Units to construct and manage their websites, and
- showing their leadership skills at the National Marine Conservation Conference in Fremantle.

2 HISTORY OF CALM BUSH RANGERS

CALM Bush Rangers is part of a broad WA Government program known as Cadets WA involving nine organisations and 7000 young people.

More than 1100 of these young people are CALM Bush Rangers, which falls under the auspices of the Department of Conservation and Land Management.

The Bush Rangers program gives secondary school students the chance to train in life skills such as leadership, teamwork and community service in conservation and

biodiversity programs, adding to the humanitarian aid, emergency services, policing and military services programs provided by other organisations in the Cadets program.

Twenty nine CALM Bush Ranger Units volunteered 180,000 hours to the study of nature conservation and to nature conservation projects across WA in 2001. Each Bush Ranger contributed at least 120 hours with a weekly commitment to the program. Each unit's diverse projects are listed on pages 7-13.

The 115 Unit instructors volunteer at least 120 hours a year under a weekly commitment. An additional 58 community volunteers contribute to the Units on a more casual basis for such activities as conservation camps or to instruct on a particular skill such as bushcraft and survival.

Expertise is offered by Department of Conservation and Land Management staff, more than 50 of whom act as program coordinators, conservation camp facilitators or fauna, flora and marine conservation experts. Their significant contribution has allowed the program to expand to the extent that it now involves young people living in rural and remote communities throughout much of the State. The eight new Units created in 2001 came from the Kimberley, Goldfields, Wheatbelt, Southern and Swan regions.

About half the Units carried out their activities after school; nine Units operated during and after school hours while five held their activities only during school hours. Units in country areas usually operated in school hours because of a need to use school bus services.

About two thirds of the Units were from State Government schools. The remaining third was equally split between Independent and Catholic schools.

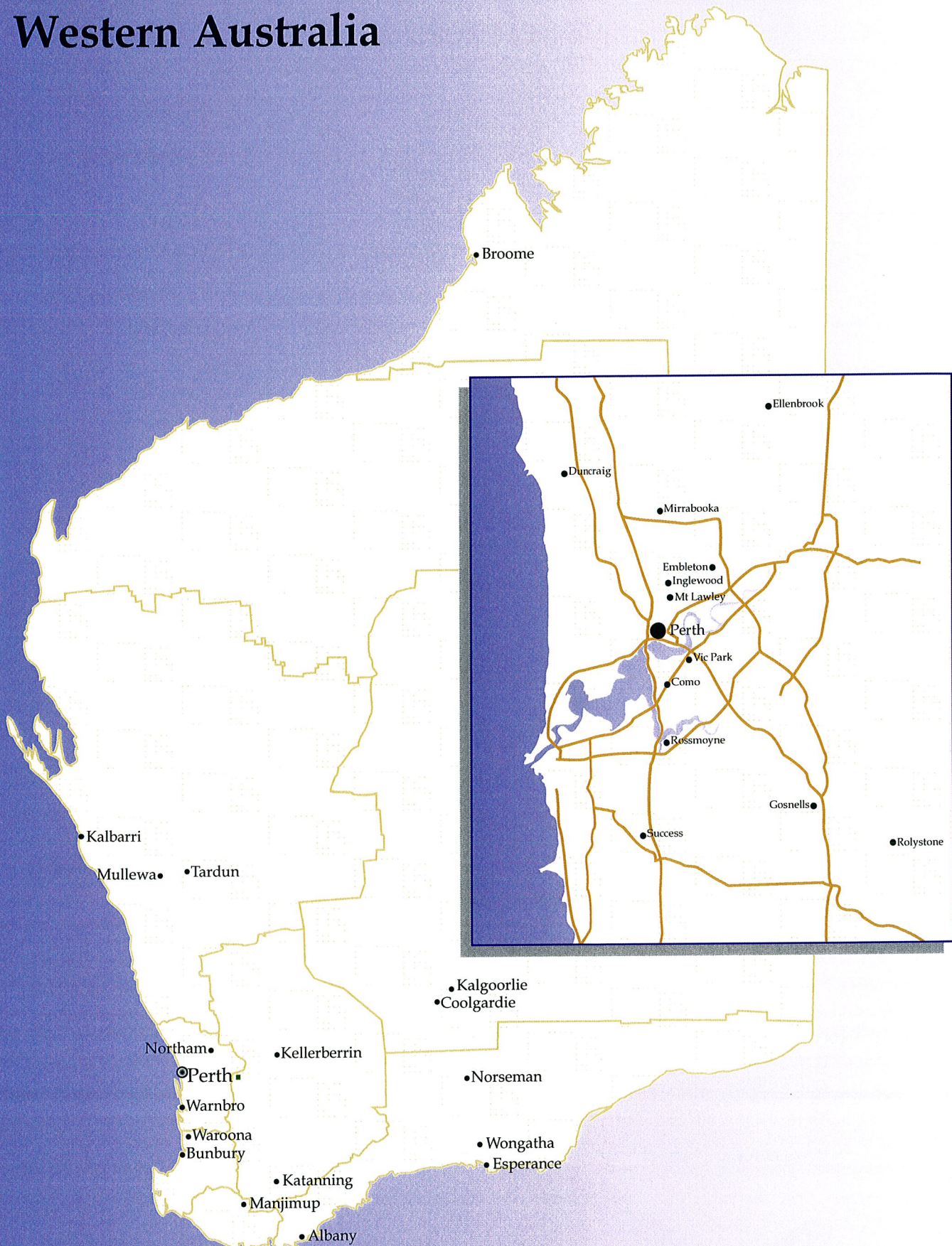
CALM Bush Rangers Units
Numbers and distribution of the three sectors in education

Year	Govt	Govt SHS SIDE	Govt SHS	Catholic DHS	Independent		Total
1998	-	-	2	-	-		2
1999	-	-	7	1	2	1	11
2000	1		10	5	3	3	21
2001	1		10	9	5	5	29

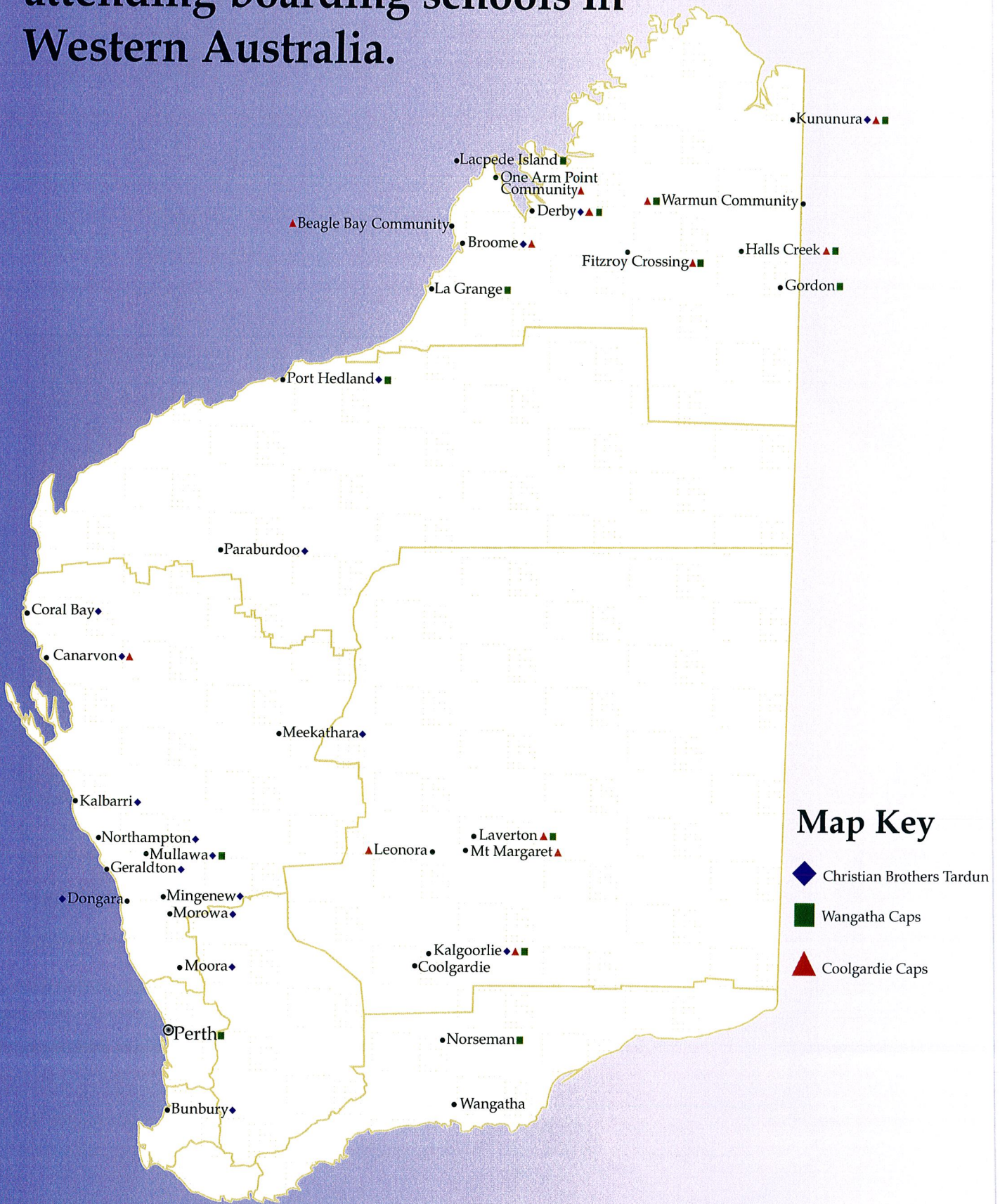
NB School of Distance Education (SIDE) students attend the new Kalbarri District High School.

CALM Bush Rangers are now across the State in each of the Department of Conservation and Land Management's regions. The Kimberley and Pilbara are represented by one Unit at Broome as well as the CALM Bush Rangers who attend Coolgardie and Wongatha CAPS and Christian Brothers boarding schools. The following maps below display the distribution of CALM Bush Rangers throughout Western Australia.

Locations of CALM Bush Ranger Units in Western Australia



Distribution of CALM Bush Rangers attending boarding schools in Western Australia.



3 CONSERVATION AND COMMUNITY SERVICE - OUR COLLECTIVE ROLE

CALM Bush Ranger Units have a strong link to their communities when it comes to conservation, and are strongly backed by those communities. As the Units become better known, their communities have placed an increased value on keeping the Bush Rangers in a positive perspective. Local communities are involved in the protection, conservation and restoration of biodiversity. An extensive range of projects is undertaken by each Unit, providing every Bush Ranger with a broad spectrum of activities to choose from. The reciprocal nature of the benefits to both communities and young people is evident by the extensive community involvement.

CALM BUSH RANGER PROJECTS

CALM Bush Ranger Units	Conservation community service projects	Community involvement
Albany Senior High School	<ul style="list-style-type: none"> • Land for Wildlife - establishment/rehabilitation of site adjacent Albany Senior High School • Wildlife Albany carers course and help • aids at Albany Wildflower exhibition • Construction of biodiversity banners for CALM Albany • Marsupial Night Stalk recording for national database. 	<ul style="list-style-type: none"> • Department of Conservation and Land Management • City of Albany • Albany Wildlife Welfare Association • Albany Wildflower Society • Fiends of Mt Clarence and Mt Adelaide • Albany Community Environment Centre • Perth Zoo
St Mary's, Broome	Planned studies <ul style="list-style-type: none"> • benthic studies and bird netting/ observation at Roebuck Bay • coastal sand dune restoration at Minyirr Park • caring for wildlife • bush tucker calendar/photographic essay 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Minyirr Park/ Rubibi people Environs Kimberley • Broome Shire Council • Department for Community Development and Youth Affairs • Bird Observatory • Wildlife Care and Rescue
Chisholm Catholic College, Perth	<ul style="list-style-type: none"> • Rehabilitation of Bayswater main drain including planting more than 2000 plants • weeding and litter reduction • native animal husbandry • site works at Fauna rehabilitation Foundation, Malaga • Keep Australia Beautiful clean up • National tree day at Eric Singleton Bird Sanctuary • Royal Show assistance at Landcare pavilion • recycling and worm farm at school • site cleaning at Yanchep National park • celebration activities in Tracks to Federation 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Bayswater Integrated Catchment Management (BICM) • Bayswater Bird Sanctuary • Malaga Fauna Rehabilitation Foundation • Keep Australia Beautiful • Tracks to Federation • Royal Agricultural Society of Perth

CALM Bush Ranger Units	Conservation community service projects	Community involvement
Como Senior High School	<ul style="list-style-type: none"> • Represent Australia at Gallipoli Dawn Service • Botanical walk native plant area maintenance • web page design • Legacy collectors • senior citizens link project • Leeuwin Cert II in Leadership 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Men of the Trees • Legacy • Leeuwin • South Perth Council • Bob Coopers Survival • Keep Australia Beautiful • Collier Park Senior Citizen Home
Coolgardie Christian Aboriginal Parent Directed School (CAPS)	<ul style="list-style-type: none"> • Maintenance and preservation of gnamma holes with local Aboriginal elders • native plant garden at the school 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Aboriginal elders • Gubrun Aboriginal Corporation • Mingarwee Corporation • Herald Mining Operations • Three Mile Hill project • Wangkangi Ngurra Tjurta Language centre • Kalgoorlie/ Boulder Urban Landcare Centre • Coolgardie Historical Society • Shire of Coolgardie • Goldfields Sea and Land Council • Safer WA Committee • Keep Australia Beautiful
Duncraig Senior High School	<ul style="list-style-type: none"> • Bushland rehabilitation at school; • Star Swamp exhibition opening • Clean Up Australia Day • seed Collecting for Rottnest Island • national tree planting day • took part in celebrations for Tracks to Federation 	<ul style="list-style-type: none"> • School • Department of Conservation and land Management • Planet Ark • Henderson Environmental Centre Rottnest Island Authority
Ellenbrook Christain College	<ul style="list-style-type: none"> • monitoring Bridges Lake • working with Native Animal Fauna Rehabilitation Foundation, Malaga 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Orienteering Association of WA • Ellenbrook Community • Pines retirement village • Red Cross Society of WA
Emmanuel Catholic College	<ul style="list-style-type: none"> • food propagation and planting for Perth Zoo • termite project of the numbat breeding program at Perth Zoo • monitoring native animals in the wetlands • control burn with Department of Conservation and Land Management's Fire Management Services • web page design • seed collecting at Rottnest Island • tree planting • taking part in Tracks to Federation activities • designing Unit banner 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Perth Zoo • Native Ark at Bibra Lakes • Rottnest Island Authority • WA Museum frogwatch

CALM Bush Ranger Units	Conservation community service projects	Community involvement
Esperance Senior High School	<ul style="list-style-type: none"> • Woody Island trapping and pathway maintenance • planning for snorkel trail • bird box construction • Red Shield Appeal • Clean up Australia Day • Tidy WA in May • sand dune revegetation at Lucky Bay • replanting on farms • recycling at school • creating school native garden 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Coast Care • Woody Island • Keep Australia Beautiful Council (WA)
Goldfields Baptist College	<ul style="list-style-type: none"> • native garden maintenance at Boulder • Burra Rocks reserve fencing and rehabilitation after wildfire • Goongarrie Biological Survey pit trapping • sailing on Leeuwin 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Kalgoolie Landcare Group • Bob Cooper's Survival
Gosnells Senior High School	<ul style="list-style-type: none"> • 10,000 trees planted in the Beverley Kokendin Catchment for salinity action • propagation of plants for Mary Carrol Park • Perup reserve native animal monitoring • owl monitoring camp • Yellow Fish drain awareness project • making nesting boxes for hillside farm • Tracks to Federation assistance • paper recycling • seed collection • making a pit trap, • Elliott and Sheffield traps • spotlighting at Dryandra Nature Reserve and Perup Forest 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Beverley Kokendin Catchment Group • Friends of Mary Carrol Reserve • Upper Canning and Southern Wungong Catchment Team • Hillside Farm • Gosnells City Council
John Forrest Senior High School	<ul style="list-style-type: none"> • maintenance at the Eric Singleton Bird Sanctuary • seed collecting • growing and harvesting zoo food • constructing a bird box • carrying out appeals for charities 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • BICM • Eric Singleton Bird Sanctuary
Kalbarri District High School and School of Distance Education	<ul style="list-style-type: none"> • native animal monitoring and handling as part of the Department of Conservation and Land Management's Western Shield project in Kalbarri National Park (for honey possums, ash grey mouse and other animals) • salinity projects • tree planting • recycling • taking part in ANZAC Day parade • Clean up Australia Day • Taking part in HMAS Sydney memorial dedication • Bush To Beach quiz night • Taking part in Leeuwin ocean adventure 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Returned Services League • Northhampton Shire Council • St John Ambulance • Kalbarri Health Centre • Kalbarri Police

CALM Bush Ranger Units	Conservation community service projects	Community involvement
Katanning Senior High School	<ul style="list-style-type: none"> • construction of pit traps for John's Well Reserve • revegetation and flora and fauna monitoring • Katanning Arboretum cleanup and plan 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Police • Katanning Catchment Group • Katanning Landcare • Katanning Shire Council
Kellerberrin District High School	<ul style="list-style-type: none"> • monitoring rare rock wallabies • salinity project including tree planting and well monitoring • creating bush tucker garden • setting up regional herbarium • creating worm farm • seed collection • sailing on Leeuwin sailing ship 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Wildflower Society of WA • Landcare • Greening Australia • Agriculture WA
John Septimus Roe Anglican Community school	<ul style="list-style-type: none"> • Fauna Rehabilitation Centre, Malaga • native animal husbandry • painting • wetland rehabilitation • site maintenance • control mosaic burn at Dwellingup • taking part in Leeuwin certificate II of leadership • assisting National Forestry Conference in Fremantle 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Fauna Rehabilitation Foundation Malaga • Leeuwin Ocean Adventure • Rottneest Island Authority • Royal Agricultural Society of WA
Manjimup Senior High School	<ul style="list-style-type: none"> • Faunadale Nature Reserve fauna species and population distribution from trapping • mapping introduced species • taking part in nationally-accredited Bushfire Awareness course • King Jarrah recreation project - maintenance of site and interpretive trails, native animal trapping and nest box installations • Western Shield monitoring including native animal handling and trapping at Perup Reserve • tree planting on Arbor Day • litter control at Windy Harbour and Shannon National Park 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Forestry Expo • Planet Ark
Mullewa District High School	<ul style="list-style-type: none"> • Rare plant Eremophila viscida germination research trials including burning regime trial • Mullewa Wildflower festival help • wildflower walk maintenance • Birds Australia Atlas • construction of frog habitat • involvement in Mallee Fowl Preservation Group • Lake Warrambo monitoring • Creating tourist signs for Council • tree planting in towns • creating native garden at Tourist Bureau • promoting wildflower country 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Mullewa Shire Council • Mullewa Tourist Bureau • Landcare • Frogwatch • Birds Australia • Mallee Fowl Preservation Group

CALM Bush Ranger Units	Conservation community service projects	Community involvement
Newton Moore Senior High School	<ul style="list-style-type: none"> • School environment centre • breeding marine fish • butterfly breeding program including construction of an enclosure • cleanup of Estuary cut and Dwellingup camp • taking part in Department of Conservation and Land Management's Fire Management Services nationally-accredited course at Bunbury • taking part in Ausyouth forum youth conference • taking part in Waste Wise conference • web-site design 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management
Norseman District High School	<ul style="list-style-type: none"> • Peak Charles native fauna trapping and monitoring • building worm farms • recycling 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management
Northam Senior High School	<ul style="list-style-type: none"> • salinity action tree planting on farms and in the town • seed collecting and sprigging of spinifex on Rottnest Island • designing and constructing native school garden • web design • paper and can recycling at school • owl monitoring at Roleystone • taking part in Leeuwin Certificate II of Leadership 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Murdoch University • Leeuwin Ocean Adventure • Rottnest Island Authority
Mt Lawley Senior High School	<ul style="list-style-type: none"> • sand dune restoration at Rottnest Island • Bringing back the swans • website • Owlwatch • Kinetic Sculpture race • WorkSafe certificates 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Rotary • WorkSafe • St Johns Ambulance • Swan River Trust
Roleystone District High School	<ul style="list-style-type: none"> • dieback control work in Roleystone • constructing nest boxes for local bush land • hosting inaugural owl monitoring protocol camp • tree planting on Arbor Day • rehabilitation of bushland including weeding • taking part in Clean up Australia campaign • taking part in Department of Conservation and Land Management's Fire Management Service's bushfire awareness certificates including a control mosaic burn at Dwellingup • Western Shield trapping and monitoring native animals at Perup Forest • taking part in Roleystone Fair's Royal Perth Landcare pavilion • taking part in Leeuwin leadership certificate II • taking part in Karragullen field day • assisting Tracks to Federation 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Friends of Canning Mills Reserve • Karragullen Field Day Group • Araluen • Tracks to Federation • Keep Australia Beautiful Council (WA) • Roleystone Dieback Group • Royal Agricultural Society of WA's Landcare Pavilion • City of Armadale

CALM Bush Ranger Units	Conservation community service projects	Community involvement
Rossmoyne Senior High School	<ul style="list-style-type: none"> • rehabilitation of Bull Creek • taking part in Canning River foreshore planting • propagation of terrestrial and aquatic plants • Bibra Lake Wildlife Carers - Native Ark animal husbandry and fund raising • Clean up Australia/Tidy WA in May • Arbor Day tree planting • Western Power salinity action tree planting at Hotham and Williams • World Environment Day peer mentoring at Herdsman Lake Wildlife Centre • dieback control in Bill Brown Park • harvesting food for giraffes at Perth Zoo • taking part in Australia Day Skyshow • school recycling • creating a worm farm • creating art display at the school environment centre • maintaining Harry Waring Marsupial Reserve • peer mentoring at local primary schools on Threatened Species day • taking part in Red Cross appeal 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Melville City Council • Perth Zoo • Native Ark Bibra Lakes • Western Power • Herdsman Lake Wildlife Centre • Kings Park • Royal Agricultural Society of WA • Harry Waring Marsupial Reserve • Red Cross Society of WA • Rottneest Island Authority • Rogaining and Orienteering Associations of WA
Tardun Christian Brothers College	<ul style="list-style-type: none"> • farm conservation and land management including salinity action, clean-up, weeding and revegetation • survey of mallee fowl nests • animal husbandry and maintenance at the Kembla Zoo wildlife centre Mullewa • clean-up of Mullewa's parklands, laneways and road verges with the Council 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Local Landcare group • Mallee Fowl Association WA • Kembla Zoo wildlife rehabilitation Centre, Mullewa • Mullewa Council
Ursula Frayne Catholic College	<ul style="list-style-type: none"> • fauna rehabilitation • native animal husbandry • wetland restoration • weeding • promotion of art • site works • working at Royal Agricultural Society's Landcare Pavilion at Royal Show • taking part in Remembrance Day ceremony • taking part in Leeuwin sailing voyage for Leadership Certificate II • taking part in Tidy WA in May 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Fauna Rehabilitation Foundation, Malaga • Leeuwin Ocean Adventure • Rogaining Association of WA • Royal Agricultural Society of WA
Waroona District High School	<ul style="list-style-type: none"> • planting native trees in school grounds • weeding • regenerating land around Waroona Weir; taking part in owl watching • taking part in brushtail possum night stalk • taking part in AUSYOUTH forum • taking part in dieback project 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Crossing the Boundaries Landcare Group, • Alcoa World Alumina Australia • AUSYOUTH • Planet Ark • Leeuwin Ocean Adventure • Waroona Shire Council

CALM Bush Ranger Units	Conservation community service projects	Community involvement
Warnbro Community School	<ul style="list-style-type: none"> • Rockingham Environmental Centre site works • tree planting with Edison Mission • Port Kennedy Scientific park management • taking part in Leeuwin Leadership II Certificate 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • Rockingham Environmental Centre • Men of the trees • Birds Australia • Kwinana Town Council
Wongatha Christian Aboriginal Parent Directed School (CAPS)	<ul style="list-style-type: none"> • salinity action tree planting and fencing and water quality monitoring • native animal trapping and monitoring at Lucky Bay • rehabilitation of remanent bushland on the school farm 	<ul style="list-style-type: none"> • School • Department of Conservation and Land Management • local fire officer • St John Ambulance

4 TEAMWORK AND LEADERSHIP

Teamwork, leadership and the development of other life skills are an integral feature of the CALM Bush Ranger program. Many Units have rangers who 'peer teach' the biodiversity message at their high schools and at local primary schools, with rangers from John Septimus Roe Anglican Community School involving adults at a national marine conference in its marine community monitoring program.

An inaugural sailing voyage run by the Department of Conservation and Land Management and Leeuwin Ocean Adventure provided 40 cadets with the opportunity to obtain a Leadership Certificate II qualification, with cadets working as teams for six days, meeting cadets from Units from throughout the State.

Other collaborative meeting points were 'reward trips' for Bush Rangers to the Department of Conservation and Land Management's controlled burns at Dwellingup, Manjimup and Bunbury, and to camps for the scientific monitoring of flora and fauna at Perup Forest near Manjimup.

Activities such as Owlwatch and other regional camps brought more and more Bush Rangers together while former Year 12 Bush Rangers felt such an affinity to the program that they returned as adult instructors for their Units.

A senior ranger from Ursula Frayne Catholic College was presented with an Australia Day Youth Award and acknowledged for leadership in her Community.



5 CONSERVATION ACROSS THE STATE

CALM Bush Ranger cadets have contributed to helping the Department of Conservation and Land Management to fulfill its objectives of creating community awareness and support for biodiversity conservation.

Now in its fourth year, the skill of the Bush Rangers continues to increase. One cadet works with the Department's mapping (Geographic Information Systems GIS) section and, in conjunction with scientists and experts in the section, maintains an owl monitoring computer mapping program. Another cadet has been electronically recording owl calls to create a CD ROM. The owl-monitoring venture will eventually allow communities throughout the State to monitor owl populations.

Other Bush Rangers have been involved in Western Shield, the Department's program to bring wildlife back from the brink of extinction. At Kalbarri National Park and Perup Forest, cadets have joined park rangers and scientists in research and recording.



6 COMMUNICATING CALM BUSH RANGERS

Communicating biodiversity issues is a major component of CALM Bush Rangers, and one which is well received by the community. The Bush Rangers not only communicate what they are doing but constructively involve other young people and their communities.



Unit	Newspaper	Internet	Power Point	Unit news Letter	School News letter	School mag	Art work	Conservation News/other Dept. com	Displays	Shows/fairs/festivals	CBR rep at youth event	Photos
Albany Senior High School	•				•		•	•	•	•	•	•
Broome St. Mary's					•					•		
Chisholm Catholic College		•	•		•				•	•	•	•
Como Senior High School	•	•			•			•			•	•
Coolgardie CAPS	•											•
Duncraig Senior High School		•	•		•					•		•
Ellenbrook Christian College	•				•							•
Ermanuel Catholic College		•			•				•	•	•	•
Esperance Senior High School	•				•				•	•	•	•
Goldfields Baptist College		•									•	•
Gosnell's Senior High School	•				•		•	•	•	•	•	•
John Forrest Senior High School	•										•	•
Kalbarri District High School and SIDE	•				•		•		•	•	•	•
Katanning Senior High School	•											•
Kellerberrin District High School					•			•			•	•
John Septimus Roe Anglican Community School					•	•	•	•	•	•	•	•
Marjilup Senior High School			•						•	•	•	•
Mullewa District High School					•		•		•	•	•	•
Mt Lawley Senior High School	•	•	•	•	•				•	•	•	•
Norseman District High School					•							
Newton Moore Senior High School	•	•	•		•				•	•	•	•
Northam Senior High School	•	•	•	•	•		•		•	•	•	•
Roleystone District High School	•				•	•	•		•	•	•	•
Rossmoyne Senior High School	•	•	•	•	•		•	•	•	•	•	•
Ursula Frayne Catholic College	•		•	•	•	•	•	•	•	•	•	•
Tardun Christian Brothers College					•							
Waroona District High School	•				•						•	•
Warnbro Community High School	•				•		•		•	•	•	•
Wongatha CAPS					•							

7 NATIONAL ACCREDITATION - A PROGRAM WITH CREDENTIALS

CALM Bush Rangers is a hands-on program with a nationally accredited set of manuals that act as scaffolding to the field work. Each Bush Ranger Unit creates an annual plan for its projects. This is done in conjunction with criteria set up in the manual.

Each Unit has an annual community promotion ceremony.

An option to dovetail CALM Bush Rangers and training into the formal vocational education system is being trialed.

8 REWARDS AND ACKNOWLEDGMENT

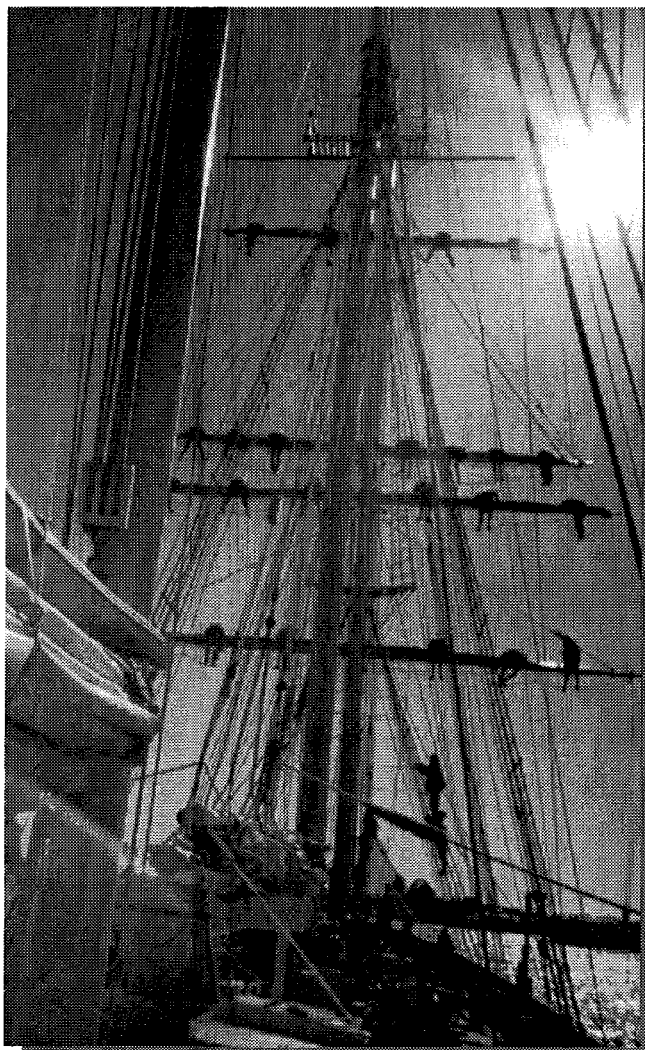
Rewards included cadets receiving participation certificates on a regular basis, taking part in 'reward camps' and working with the Department of Conservation and Land Management's researchers and operational staff.

In 2001 the rewards were:

- two field trips to the Perup Forest to work with the Department's Science Division,
- three Fire Management Services' nationally accredited 'Basic Fire Awareness' courses at Dwellingup, Bunbury and Manjimup,
- native fauna trapping at Kalbarri National Park, and
- a six-day sailing venture for 40 Bush Rangers from across Western Australia in the inaugural Department of Conservation and Land Management-Leeuwin 'Certificate II of Leadership' voyage.

Each Bush Ranger was selected for a reward by his or her Unit on the basis that each would take new leadership skills back to the Unit and the community.

In 2001, four Units were finalists in the WA Youth Awards. One CALM BushRanger was an Award recipient.



9

NATIONAL AND INTERNATIONAL CALM BUSH RANGER EVENTS

- Five Units took part in the 'Tracks to Federation' re-enactment at East Perth railway station as part of the Centenary of Federation National program.
- An instructor and a Bush Ranger attended the 'Spirit of ANZAC' tour to Europe and took part in the Gallipoli dawn service.
- The Bush Ranger program was showcased at the second national Youth Conference in Adelaide.
- Bush Rangers and organisers contributed to the Commonwealth Government's 'Good Practice in Youth Development' document and took part in the National Provider Reference Group for Youth Development.
- A Bush Ranger instructor represented the CALM Bush Ranger program at the National Conference for Youth in Perth.
- A senior ranger was selected to be Western Australia's youth representative for the Centenary of Federation, and toured Australia in that role taking part in interstate events.
- A senior ranger and Unit leader received Australia Day awards at Victoria Park.

10

PROFESSIONAL DEVELOPMENT

Inservicing is provided to schools, communities and the Department of Conservation and Land Management's districts and branches and is a way of forming formal and informal social networks. As each Bush Ranger Unit was formed, there was extensive inservicing provided to the community and local Departmental staff.

The annual professional development inservice for more than 50 adult instructors was held at Dwellingup in May. Instructors were able to:

- network with instructors from across the state,
- exchange information on a variety of conservation and community service projects and camps
- gain information about the function of the Department's Wildlife Branch and associated community groups, and
- gain practical skills in bush plants and bushcraft survival.

The emphasis of inservicing is to empower Bush Ranger Units and communities to take part in conservation projects with confidence. Units liaise with the Department's District coordinator and the State CALM Bush Ranger coordinator on a regular basis.

Other professional development offered to instructors included a bush fire awareness course, fauna trapping at Perup Forest, first aid and water certificates, planning and reporting days, and conferences.

11 RISK MANAGEMENT

The principal of each school is responsible for authorising CALM Bush Ranger activities in regard to risk management. The program confirmed arrangements with all principals in relation to police checks and short term volunteer declarations.

Risk management is an inherent part of the program. Nearly every Unit has a teacher as an instructor. This ensures that Bush Rangers are under the supervision of professionals who possess the required skills and knowledge for appropriate duty of care.

12 CONCLUSION

CALM Bush Rangers thank the 115 Unit instructors and the more than 50 Department of Conservation and Land Management staff who ensure WA's young people and their communities have meaningful opportunities in conservation.

Bronwyn Humphreys

State Coordinator, CALM Bush Rangers

Appendix One- CALM Bush Ranger Unit Statistics					
Unit	Curriculum or extra Curriculum	Number Cadets	Rank	Number Instructors + volunteers	Number volunteer hours
Albany Senior High School	E	15	Ranger recruit: 6 Ranger 5 Ranger first class 1 Ranger Section Leader: Deputy ranger leader Ranger Unit leader	2 + 7	3288
Broome St Mary's	E	20	Ranger recruit: 2 Ranger 18 Ranger first class 2 Ranger Section Leader: Deputy ranger leader Ranger Unit leader	2	(just started) end 2001
Chisholm Catholic College	E	30	Ranger recruit: Ranger 27 Ranger first class 3 Ranger Section Leader: Deputy ranger leader Ranger Unit leader	3 + 1	4080
Como Senior High School	E	27	Ranger recruit: Ranger 17 Ranger first class 8 Ranger Section Leader: 3 Deputy ranger leader Ranger Unit leader	3	3600
Coolgardie CAPS	B mainly extra	36	Ranger recruit: Ranger 2 Ranger first class 34 Ranger Section Leader: Deputy ranger leader Ranger Unit leader	4	10800
Duncraig Senior High School	E	44	Ranger recruit: Ranger 29 Ranger first class 10 Ranger Section Leader: 3 Deputy ranger leader 1 Ranger Unit leader 1	7	8568
Ellenbrook Christain College	C	35	Ranger recruit: Ranger 35 Ranger first class Ranger Section Leader: Deputy ranger leader Ranger Unit leader	5	7280
Emmanuel Catholic College	C	45*	Ranger recruit: Ranger 41 Ranger first class Ranger Section Leader: 4 Deputy ranger leader Ranger Unit leader	3 + 4	6240
Esperance Senior High School	B	66	Ranger recruit: Ranger 40 Ranger first class 20 Ranger Section Leader: 4 Deputy ranger leader 1 Ranger Unit leader 1	7	8760
Goldfields Baptist College	B	21	Ranger recruit: Ranger 21 Ranger first class Ranger Section Leader: Deputy ranger leader Ranger Unit leader	1 + 2	2880

Unit	Curriculum or extra Curriculum	Number Cadets	Rank	Number Instructors + volunteers	Number volunteer hours
Gosnells Senior High School	E	37	Ranger recruit: Ranger 30 Ranger first class 5 Ranger Section Leader: Deputy ranger leader 1 Ranger Unit leader 1	4	4920
John Forrest Senior High School	C	108	Ranger recruit: Ranger Ranger first class Ranger Section Leader: Deputy ranger leader Ranger Unit leader	7	12960
Kalbarri District High School and SIDE	B	25	Ranger recruit: Ranger 22 Ranger first class 3 Ranger Section Leader: Deputy ranger leader Ranger Unit leader	2 + 2	5999
Katanning Senior High School	E	19	Ranger recruit: 19 Ranger Ranger first class Ranger Section Leader: Deputy ranger leader Ranger Unit leader	3 + 2	Started end 2001 350
Kellerberrin District High School	C	17	Ranger recruit: Ranger 17 Ranger first class Ranger Section Leader: Deputy ranger leader Ranger Unit leader	2 + 1	6000
John Septimus Roe Anglican Community School	E	55	Ranger recruit: Ranger Ranger first class Ranger Section Leader: Deputy ranger leader 1 Ranger Unit leader 1	5 + 1	7200
Manjimup Senior High School	B	18	Ranger recruit: Ranger 11 Ranger first class 3 Ranger Section Leader:4 Deputy ranger leader Ranger Unit leader	2 + 8	3680
Mullewa District High School	B	15	Ranger recruit: Ranger 14 Ranger first class 1 Ranger Section Leader: Deputy ranger leader Ranger Unit leader	3 + 1	1000
Mt Lawley Senior High School	E	26	Ranger recruit: Ranger 17 Ranger first class 5 Ranger Section Leader:2 Deputy ranger leader 1 Ranger Unit leader 1	3 + 1	3360
Norseman District High School	C	8	Ranger recruit:5 Ranger 3 Ranger first class Ranger Section Leader: Deputy ranger leader Ranger Unit leader	3 + 3	1200

Unit	Curriculum or extra Curriculum	Number Cadets	Rank	Number Instructors + volunteers	Number volunteer hours
Newton Moore Senior High School	B	34	Ranger recruit: Ranger Ranger first class Ranger Section Leader: Deputy ranger leader Ranger Unit leader	4	4440
Northam Senior High School	E	59	Ranger recruit: Ranger 35 Ranger first class 3 Ranger Section Leader:2 Deputy ranger leader Ranger Unit leader	5 + 6	5540
Roleystone District High School	E	32	Ranger recruit: Ranger Ranger first class Ranger Section Leader: Deputy ranger leader Ranger Unit leader	3 + 1	8604
Rossmoyne Senior High School	E	40	Ranger recruit:10 Ranger 26 Ranger first class 24 Ranger Section Leader:8 Deputy ranger leader 1 Ranger Unit leader 1	5 + 7	12000
Ursula Frayne Catholic College	E	9	Ranger recruit: Ranger 1 Ranger first class 4 Ranger Section Leader:2 Deputy ranger leader1 Ranger Unit leader1	6 + 4	2140
Tardun Christian Brothers	B	54	Ranger recruit: Ranger 54?? Ranger first class Ranger Section Leader:4 Deputy ranger leader Ranger Unit leader	2 + 5	6480
Waroon District High School	E	25	Ranger recruit: 20 Ranger 3 Ranger first class 2 Ranger Section Leader: Deputy ranger leader Ranger Unit leader	3 + 2	2970
Warnbro Community High School	E	58	Ranger recruit: Ranger 50 Ranger first class 3 Ranger Section Leader:1 Deputy ranger leader Ranger Unit leader	5	6530
Wongatha CAPS	B	52	Ranger recruit: Ranger Ranger first class Ranger Section Leader: Deputy ranger leader Ranger Unit leader	11	11664
Totals	C = curriculum E = extra Curriculum B = both curriculum and extra Curriculum	1032 (these figures fluctuate over the year)		I = instructors = 119 V = adult volunteers 56	Over 180 000

Title	Name	Position	School/Unit
Ms	Wendy Nelson	Unit Leader	Northam SHS CALM Bush Rangers
Mr	Gregory Stokes	Instructor	Northam SHS CALM Bush Rangers
Ms	Margaret Hemsley	Instructor	Northam SHS CALM Bush Rangers
Mr	Graham Gibson	Unit Leader	Manjimup SHS CALM Bush Rangers
Ms	Darlene Haward	Instructor	Manjimup SHS CALM Bush Rangers
Mr	Stuart Harris	Unit Leader	Ellenbrook Christian College CBR
Mr	Rodney Desilva	Unit Leader	Ellenbrook Christian College CBR
Ms	Kalene Beard	Instructor	Ellenbrook Christian College CBR
Ms	Margaret McIlroy	Instructor	Ellenbrook Christian College CBR
Ms	Ursula Prause	Instructor	Ellenbrook Christian College CBR
Mr	Gerald Fontaine	Unit Leader	John Forrest SHS CBR
Ms	Tanya Cowie	Instructor	John Forrest SHS CBR
Mr	Ross Mars	Instructor	John Forrest SHS CBR
Mr	Rod McLean	Instructor	John Forrest SHS CBR
Ms	Colleen Michel	Instructor	John Forrest SHS CBR
Mr	Brad Sammels	Instructor	John Forrest SHS CBR
Mr	Brian Christie	Instructor	John Forrest SHS CBR
Mr	Andrew Paul	Unit Leader	Mount Lawley SHS CBR
Ms	Sue Head	Instructor	Mount Lawley SHS CBR
Ms	Kerry Love	Instructor	Mount Lawley SHS CBR
Ms	Soo Buckle	Unit Leader	Chisholm CC CBR
Mr	Laurence Venus	Instructor	Chisholm CC CBR
Ms	Carol Paine	Instructor	Chisholm CC CBR
Ms	Veronica Cooper	Unit Leader	Emmanuel CC CBR
Ms	Sharon Schubert	Instructor	Emmanuel CC CBR
Ms	Helen Myers	Instructor	Emmanuel CC CBR
Mr	Glen Saw	Unit Leader	Cornerstone CC CBR
Mr	Robert Cameron	Instructor	Cornerstone CC CBR
Mr	Kevin Lloyd	Unit Leader	Newton Moore SHS CBR
Mr	Kelvin Green	Instructor	Newton Moore SHS CBR
Mr	Shane McKenna	Instructor	Newton Moore SHS CBR
Ms	Kylie Glancy	Instructor	Newton Moore SHS CBR
Mr	George Georgis	Instructor	John Septimus Roe ACS CBR
Mr	Peter Bowers	Instructor	John Septimus Roe ACS CBR
Mr	Stephen Edwards	Instructor	John Septimus Roe ACS CBR
Mr	Benjamin Marson	Instructor	John Septimus Roe ACS CBR
Mr	Stephen Keeling	Unit Leader	Warnbro CC CBR
Mr	Kent Chambers	Instructor	Warnbro CC CBR
Ms	Chantel Wyten	Instructor	Warnbro CC CBR
Mr	Jacek Olchowick	Instructor	Warnbro CC CBR
Ms	Teresa Parish	Instructor	Warnbro CC CBR
Mr	Andrew Maccan	Unit Leader	Esperance SHS CBR
Mr	Craig Pope	Instructor	Esperance SHS CBR
Mr	Craig Snow	Instructor	Esperance SHS CBR
Ms	Amanda Tressler-Smith	Instructor	Esperance SHS CBR
Ms	Fiona Heaney	Instructor	Esperance SHS CBR
Mr	Jamie Long	Instructor	Esperance SHS CBR
Mr	Jared Davies	Unit Leader	Keleberrin DHS CBR
Ms	Emma Kingston	Instructor	Keleberrin DHS CBR
Ms	Violet Turvey	Instructor	Wongutha CAPS CBR
Ms	Helen Edwards	Instructor	Wongutha CAPS CBR
Mr	Gary Paul	Unit Leader	Wongutha CAPS CBR
Mr	Wayne Harris	Instructor	Wongutha CAPS CBR
Mr	Wayne Rogan	Instructor	Wongutha CAPS CBR
Ms	Julie Rogan	Instructor	Wongutha CAPS CBR
Mr	George Turvey	Instructor	Wongutha CAPS CBR
Ms	Annie Dabb	Instructor	Wongutha CAPS CBR
Ms	Pauline Graham	Instructor	Wongutha CAPS CBR
Ms	Gloria Beach	Instructor	Wongutha CAPS CBR
Ms	Lisa Rowgaowski	Unit Leader	Como SHS CBR
Ms	Maureen Smith	Instructor	Como SHS CBR
Ms	Tricia Gilbert	Unit Leader	Duncraig SHS CBR

Mr	Nicholas Devellerez	Instructor	Duncraig SHS CBR
Ms	Leslie Webster	Instructor	Duncraig SHS CBR
Mr	Jason Shroeder	Instructor	Duncraig SHS CBR
Ms	Robyn Paul	Instructor	Duncraig SHS CBR
Ms	Kathleen Webster	Instructor	Duncraig SHS CBR
Ms	Kerryn Waller	Instructor	Duncraig SHS CBR
Ms	Lyn Wilkinson	Unit Leader	Gosnells SHS CBR
Mr	Doug Ridley	Instructor	Gosnells SHS CBR
Mr	Stuart Jones	Instructor	Gosnells SHS CBR
Ms	Eunice Robinson	Instructor	Gosnells SHS CBR
Ms	Ann Coppens	Unit Leader	Ursula Frame CC CBR
Mr	Grey Mackay	Instructor	Ursula Frame CC CBR
Ms	Luke Coppens	Instructor	Ursula Frame CC CBR
Mr	Mathew Walsh	Instructor	Ursula Frame CC CBR
Mr	Luke McLachlan	Instructor	Ursula Frame CC CBR
Mr	Israel Austin	Instructor	Ursula Frame CC CBR
Mr	Michael Casley	Unit Leader	Rossmoyne SHS CBR
Mr	Tony Wright	Instructor	Rossmoyne SHS CBR
Ms	Sandra Swain	Instructor	Rossmoyne SHS CBR
Ms	Nellie Petrovich	Instructor	Rossmoyne SHS CBR
Mr	Phillip Docherty	Unit Leader	Mullewa DHS CBR
Mr	Revis Comeagain	Instructor	Mullewa DHS CBR
Mr	Mike Barr	Instructor	Mullewa DHS CBR
Ms	Val Davies	Unit Leader	Albany SHS CBR
Mr	Steve Davies	Instructor	Albany SHS CBR
Ms	Sophie Pisano	Instructor	Kalbarri DHS CBR
Ms	Penelope Smith	Unit Leader	Kalbarri DHS CBR
Mr	Richard Bourne	Instructor	Coolgardie CAPS CBR
Mr	Darren Moody	Instructor	Coolgardie CAPS CBR
Mr	Robert Walley	Instructor	Coolgardie CAPS CBR
Mr	William Vincent	Unit Leader	Coolgardie CAPS CBR
Ms	Elia McAllister	Unit Leader	St Brigid's College CBR
Mr	Jeffrey Clarke	Instructor	St Brigid's College CBR
Ms	Chelsea Tokin	Instructor	St Brigid's College CBR
Mr	Paul Huisman	Unit Leader	Roleystone DHS CBR
Ms	Glenda Huisman	Instructor	Roleystone DHS CBR
Ms	Karen Brooks	Instructor	Roleystone DHS CBR
Mr	Greg Combs	Unit Leader	Goldfields Baptist College CBR

Appendix Three
 Acknowledgments for contribution to the CALM Bush Rangers program
 Department of Conservation and Land Management staff 2001

Region	District/ Branch	Name
	Fire Management Services	Ross Mead
		David Rawet
		Kevin White
	Science Division	
		Graeme Liddelow
		Bruce Ward
		Ian Wheeler
	Bunbury	Peter Henderson
	South West Capes	
		Glenn Wilmott
	Shannon National Park	Jeff Kimpton
		Paul de Tores
Corporate Services		
	Risk Management Section	
		Alicia Taylor
	Organisational Learning and Development	
		Alan Byrne
	GIS	
		Robyn Wilson
		David Robertson
Goldfields	Kalgoorlie	
		Sarah Adriano
		Darren Graham
Kimberley	West Kimberley	
		Tim Willing
		Kingsley Miller
Midwest	Geraldton	
		Alanna Chant
		Anthony Desmond
		Mike Paxman
		Lindsay Baker
		Greg Tapley
Marine Branch		
		Tim Grubba
Nature Conservation Division	Off - reserve Conservation	
		Penny Hussey and Land for Wildlife Officers
	Wild life protection Section	
		Peter Lambert
		Matt Warnock
		Trevor Walley
Parks, Recreation, Planning and Tourism Division		
	Bibbulmun Track	
		Annie Keating
	Munda Biddi Trail	
		Therese Jones
Pilbra	Exmouth District	
		John Hanel
		Chris Davis
		Terry Harrington
South Coast	Albany	
		Martin Lloyd
		Sylvia Leighton
		Barb Green
		Karlene Bian
		Neil Scott

Region	District/ Branch	Name
Esperance		
		Geoff Passmore
		Ian Hughes
		Wayne Williams
Warren Region	Donnelly District	
		Tim Foley
		Ian Wilson
Swan Region	Swan Coastal District	
		Deanne Pember
		Lyndon Mutter
		Clayton Sanders
		Rod Martyn
	Yanchep National park	
		John Wheeler
	Perth Hills District	
		Ingrid Hunt
Wheatbelt Region	Katanning	
		Des Plumb
	Merredin	Matt Dowling

Staff are involved as District or Branch coordinators of the program but may also be involved to coordinate conservation camps and events for Bush Ranger Units outside their district.