

t's been a busy year for Alison Doley. She's had Murdoch veterinary students staying on her property gaining experience in farm life, she's been out counting numbers of Carnaby's cockatoos and other bird species, she has lent a hand to Department of Environment and Conservation (DEC) staff working to protect waterways on her land, and she's got her hands dirty planting trees and pulling weeds. Oh yes, and she's run her 7,173-hectare sheep, cattle and cropping farm too.

But such is the norm for this inspiring yet humble 74-year-old farmer and conservationist. Alison has spent a lifetime committed to conserving nature on her property Koobabbie, 25 kilometres south-east of Coorow and 250 kilometres north of Perth, while also running it as a profitable farming enterprise. Along with her late husband John, she has fenced off 41.5 per cent of the farm's total area to prevent the trampling hooves of stock from damaging fragile environments, bought a large parcel of salt-lake country, not to run stock but simply to ensure its protection, and taken meticulous records of bird numbers, rainfall, groundwater and native flora too.

"She's an achiever, that's for sure," says DEC's recovery catchment officer Gavan Mullan, who has worked



alongside Alison to manage water on Koobabbie. "If it relates to her property and it relates to flora and fauna, she's onto it."

An environmentalist emerges

At the age of just 25, Alison took on management of the family farm she'd grown up on after her parents died within two years of each other in 1962 and 1964. Along with her husband John, Alison set to work running the farm, while also ensuring the protection of its plants and animals. "My family had always been sympathetic to conserving the natural environment when clearing the farm," she says. "But the original fencing of wooden posts with six plain wires was no longer stock proof. Only

Previous page

Main Magnificent stands of salmon gum
(Eucalyptus salmonophloia) occur at
Koobabbie.

Photo – Jiri Lochman
Inset top Alison Doley.
Photo – Catherine Stokes
Inset bottom A Carnaby's cockatoo.
Photo – Jiri Lochman

Left Gypsum crystals adorn the lake at Koobabbie.

Photo – Gavan Mullan/DEC

Below left Alison collecting the Mediterranean insect *Neomoglus* capillatus to help control lucerne flea. Photo courtesy of Alison Doley

one rocky hill was fenced from stock. So gradually the farm was re-fenced, and in the process bush was fenced off, as money and labour became available."

The first 50 kilometres of fencing to exclude stock was completed entirely at John and Alison's own expense. Some people shook their heads. What nonsense to devote so much time and money without any hint of profit, they said. But the couple forged on undaunted.

A passion intensifies

In the early 1970s Alison read a book by Western Australian naturalist Barbara York-Main entitled Between Wodjil and Tor and her determination to save the land intensified. She decided that every patch of remnant bush should be fenced to protect it from grazing by stock. "The book provided a very interesting account of bush on a farm and what goes on at a granite outcrop in a year, with everything from the birdlife to insect life and plant life-it convinced me that every little bit of bush should be saved," Alison says. So she and John set to work fencing off uncleared areas of the farm armed with nothing but basic tools, doggedness and faith in the environmental value of their work.

In 1987 came another major decision when Alison and John bought 2,208 hectares of mainly salt-lake country, of which just 336 hectares were arable. As the salt-lake country had been overgrazed they fenced off 1,872 hectares to exclude stock, and let the land regenerate naturally. "I remember at the Waddy Forest tennis





Above Alison and John Doley inspect the declared rare Fitzgerald's mulla mulla. *Photo – Greening WA*

court a neighbour suggesting it was wasteful to buy the area to have it all shut off to stock," she recalls. "But I was tickled pink when we got that land." Indeed, on rare moments when Alison finds the time, she travels to this area of Koobabbie and takes great delight in the sight of the lake with its gypsum crystals shining dazzlingly white in the sun. During these moments of contemplation Alison also finds satisfaction in the sight of regenerated bush around the salt lakes, especially in springtime when everlastings and 20 species of orchid burst into bloom. And she relishes the knowledge that this land protects the only known population of the samphire shrub Tecticornia sp. Coorow; as well as the declared rare Fitzgerald's mulla mulla (Ptilotus fasciculatus) and the hinged dragon orchid (Caladenia drakeoides)—each growing in this safe haven protected from the damage of stock.

Elsewhere on the property, Alison marvels at the sight of *Eremophila koobabbiensis*—a species that grows nowhere else in the world but on her

property—as well as the declared rare flora prostrate flame pea (*Chorizema humile*), which grows in bush that was fenced off in 1972, under weldmesh guards to protect it from grazing kangaroos.

Hard slog

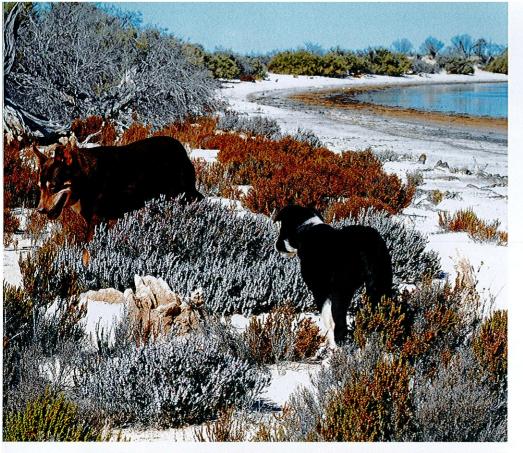
But protecting the land is about so much more than simply fencing it off. Alison has also devoted much time and labour to controlling Paterson's curse (*Echium plantagineum*), radish (*Raphanus raphanistrum*), afghan melons (*Citrullus lanatus*), a small infestation of saffron thistle (*Carthamus lanatus*) and caltrop (*Tribulus terrestris*). In addition, a large population of African love grass (*Eragrostis curvula*) was eradicated when she realised it was a serious weed.

Alison also put her attention to sourcing outside funding to continue her conservation work. In the 1990s small grants were available to landholders to fence off bush under the Remnant Vegetation Protection Scheme. Taking up the opportunity, Alison was able to ensure two more bush areas on Koobabbie were fenced.

Under the Natural Heritage Trust's small grants program for grassroots projects, the Waddy Forest Land Conservation District acquired funding to establish four groundwater-monitoring bores on Koobabbie in 1996 and another four in 1998. The bores were established as part of a network over the Waddy Forest Land Conservation District. In 2000, under the Natural Heritage Trust Marchagee Catchment Bushcare project, another two groundwater-monitoring bores were established. Alison measures each of these bores monthly and reports the height of the watertable to a DEC hydrologist.

In addition to reporting on the water monitoring project, Alison provides rainfall records to DEC, as well as the Bureau of Meteorology—something her family has been doing since 1911. In July 2012, the bureau presented a 100-year award to the Rudduck/Doley family at Koobabbie to acknowledge the ongoing assistance. The combination of bore and rainfall records has been particularly useful to DEC for its Buntine-Marchagee Natural Diversity Recovery Catchment operations.

Koobabbie is in the north-west corner of this catchment and Alison has been on the Buntine-Marchagee Natural Diversity Recovery Catchment steering committee since its inception in 2001. In 2006, planning





took place for Koobabbie's part in an integrated water management project in the catchment which sought to protect the land from flooding and the effects of other changes in landscape hydrology. With help from Alison, DEC fenced off two main drainage lines, established grade banks and levee banks, revegetated drainage lines and areas not suited to agriculture, created wildlife corridors and fenced off the last areas of remnant vegetation from stock. The resultant landscape ensures that surface and ground water are better managed, with benefits to both biodiversity conservation and agricultural production.

In another project, Alison received Natural Heritage Trust funding in 2002 to install eight kilometres of fencing and plant several thousand seedlings as part of a wildlife corridor project.

Birds benefit

In the 1980s the Coorow Wildflower Study Group brought speakers to the district, including the father of Carnaby's cockatoo (Calyptorhynchus latirostris) conservation, Dr Denis Saunders, in 1987. Hearing Denis speak about the charismatic Carnaby's cockatoo sparked a new passion for Alison. Between 1987 and 1990 she joined a group of volunteers

Left The samphire shrub *Tecticornia* sp. Coorow grows nowhere else but the shores of this lake on Koobabbie. *Photo – Catherine Stokes*

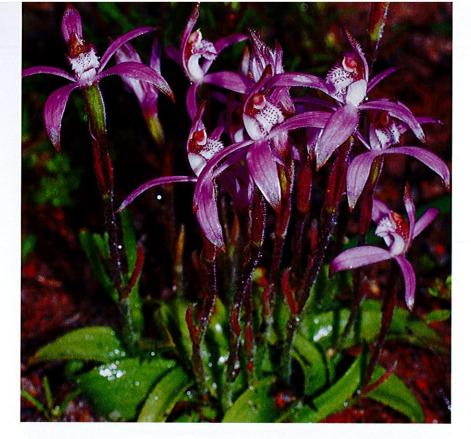
Below left Carnaby's cockatoos. Photo – Marie Lochman

who would record bird species seen each week in a checklist booklet and report back to Denis. But Alison didn't stop there. She continued to keep the checklist each year and has just provided 25 years of data to Denis, who is now writing a paper based on Alison's sightings. Alison has also provided the data to ornithologist and landscape ecologist Dr Andrew Huggett, whom she employed to conduct a bird survey on Koobabbie in spring 2012 and autumn 2013.

Alison has also been a member of the Carnaby's Cockatoo Recovery Team since its inception in 2000. She has welcomed volunteers from Birds Australia to Koobabbie to repair nest hollows and she's helped monitor nearly 100 nesting sites. She has also made Koobabbie available to DEC staff working to protect Carnaby's cockatoos by banding chicks and collecting DNA samples.

In 1996, Alison realised the more aggressive corellas (Cacatua sp.) were taking over Carnaby's cockatoo nest hollows. So, with John's help, she removed corella eggs from nests, enabling Carnaby's cockatoos to reclaim them. The same year Neil Johns came to work on Koobabbie and, with a Scientific and Other Prescribed Purposes (SOPP) licence, started shooting corellas who stole Carnaby's nest hollows. More recently, members of the Sporting Shooters Association have supplemented Neil's work and are helping to control corella and galah (Eolophus roseicapilla) (also under a SOPP licence), feral cat, fox and rabbit numbers.

In 2009, an unidentified disease killed at least 16 Carnaby's cockatoos, resulting in the number of chicks dropping from up to 25 chicks before 2009 to just seven chicks banded in 2011. To Alison's dismay, the problem struck again last year when another eight of the cockatoos were found



dead, including six hens sitting on eggs in their nests. Alison is hopeful that current research will shed light on the problem and prevent the condition from striking once again.

Running the farm

Of course, Koobabbie is not just about conservation. It needs to earn a quid too. Alison has always been more interested in livestock, while John was more interested in cropping. As a result the farm comprises a mixture of crops, sheep and cattle. Alison grows wheat and, in some years, chick peas, with lupins, oats and barley mainly grown for stock feed and for their value in crop rotation, which prevents the need for excessive fertiliser use. In keeping with her environmental ethos, Alison keeps spraying for weeds to a minimum, using sheep to control weeds in summer. She has also been involved in attempts to reduce insecticide use. Between 1988 and 1994, she worked with Phil Michael from the then Department of Agriculture to control lucerne flea using a species of Mediterranean insect called Neomolgus capillatus, and red-legged earth mite using another Mediterranean insect species Anystis wallacei. While the Department of Agriculture stopped the project in 1994, Alison and John decided to employ the department's retired technical officer Mary Dutch and, for several months, they worked together

distributing the predators around the farm. The work revealed that, while such predators do not eliminate a pest species, they do provide valuable control, and can reduce the need for extensive insecticide use.

As part of her everyday farming practice, Alison seeds using minimum tillage, and she no longer burns cereal stubble after harvest—both of which help prevent soil erosion.

Going on alone

On 26 January 2007 Alison's world came crashing down when John passed away from a rare form of cancer. But, in typical fashion, she soldiered on, continuing to not only run the farm but also to ensure the protection of its natural areas. While she now relies more heavily on paid workers to keep the farm running, she is by no means settling into a quiet retirement. DEC's Gavan Mullan admires her fortitude. "If you visit Koobabbie Alison will be in the sheep yards drafting sheep and in the mornings she'll be at the homestead talking to the stockmen and telling them what's happening for the week," Gavan says. "She's no slouch when it comes to farming-she is production focused and considers nature conservation options carefully, she researches things well and draws from a good network of contacts."

Alison is continuing to set her sights on the future. She is researching

Left The pink candy orchid (*Caladenia hirta* subsp. *rosea*) is one of 20 species of orchid that grows on Koobabbie. *Photo – Margaret Petridis*

Below The pom pom everlasting (*Cephalipterum drummondii*) is one of several species of everlasting on the farm. *Photo – Jiri Lochman*

covenants and putting plans in place to ensure the natural environment on her beloved Koobabbie is protected after she's gone.

"I just want to see it continue in the way it is now," she says.

"I'd like to think it will go to someone who likes livestock, who continues measuring the groundwater depth in the monitoring bores, who realises how important it is as a breeding area for Carnaby's cockatoos.

"I hope they see the land here as I do and they continue the work to preserve it. Many people have contributed to make Koobabbie what it is today and I don't want these efforts to have been in vain."

After speaking with Alison, you can't help sharing her hopes for Koobabbie and its swathes of protected bush in a heavily cleared area. The property is proof of just how much can be achieved when passionate and determined individuals set their mind to a worthy cause.



Samille Mitchell is a Department of Environment and Conservation (DEC) features writer and *LANDSCOPE* editor. She can be contacted on 0407 998 721 or by email (samille.mitchell@dec.wa.gov.au).

The author would like to thank Alison Doley and DEC's Gavan Mullan for their assistance with the article.

Volume 28 Number 3 AUTUMN 2013 COntents

- 46 Bill Wills and the nature of memory

 Memories of life on the Nullarbor Plain reveal a once-thriving suite of mammals that has now all but disappeared.
- Controlling cats: the work continues

 Controlling cats to protect our native animals is proving no easy task, so research into baiting programs continues.
- 59 An extraordinary story of a rock-wallaby colony A rock-wallaby population clings to life in an unlikely setting.

Regulars

- 3 Contributors and Editor's letter
- 15 Bookmarks
 The Canoe and Kayak Guide to Western Australia
 Biodiversity monitoring in Australia
 Guide to the Great Western Woodlands
- 44 Feature park
 Serpentine National Park
- 31 Endangered

 Quindanning spider orchid
- 62 Urban Antics Mozzies

Publishing credits

Executive editor Madeleine Clews.

Editors Samille Mitchell, Joanna Moore.

Scientific/technical advice Kevin Thiele, Lachie McCaw, Keith Morris, Michael Rule.

Design and production Gooitzen van der Meer, Lynne Whittle, Peter Nicholas, Natalie Curtis.

Illustration Gooitzen van der Meer.

Cartography Promaco Geodraft.

Marketing Cathy Birch. *Phone* (08) 9334 0296 or *fax* (08) 9334 0432.

Subscription enquiries *Phone* (08) 9219 8000.

Prepress and printing GEON, Western Australia.

© Government of Western Australia March 2013

All material copyright. No part of the contents of the publication may be reproduced without the consent of the publishers.

ISSN 0815-4465

Please do not send unsolicited material, but feel free to contact the editors.

Published by the Department of Environment and Conservation (DEC), 17 Dick Perry Avenue, Kensington, Western Australia.

Visit DEC online at www.dec.wa.gov.au to search the *LANDSCOPE* catalogue.









