

Chapter 5

Critical Habitat and other issues

An inalienable legislative protection of critical habitat is essential for ensuring the survival of threatened species population in the long term.... there is evidence that the longer the species is listed and the longer it has critical habitat, the more benefit ensues.¹

5.1 As discussed in Chapter 4, habitat loss and fragmentation is an identified key threat to threatened species and ecological communities. As a result, it was generally recognised that habitat and its management are 'central to the recovery' of threatened species.²

5.2 The committee heard about the fundamental importance of identifying and protecting *critical* habitat. 'Critical habitat' is currently defined as habitat critical to the survival of a listed threatened species or ecological community.³ For example, Ms Alexia Wellbelove from HSI declared that 'if we are not able to protect our critical habitats, which are the feeding and breeding areas of our species, then we are really wasting our time'.⁴

Critical habitat registers

5.3 However, it was generally observed that legislative provisions to list critical habitat have been under-utilised in those jurisdictions that have such provisions.⁵ At the state and territory level, the evidence to the committee indicated that Queensland, Victoria, Tasmania and NSW have provisions for the registration or listing of critical habitat.⁶ However, there has been only one temporary critical habitat listing in Victoria in 25 years;⁷ only four critical habitat listings in NSW—three of which are in

1 Nature Conservation Society of South Australia, *Submission 150*, p. 5.

2 Hunter Bird Observers Club, *Submission 176*, p. 1.

3 EPBC Act, ss. 207A(4).

4 Ms Alexia Wellbelove, HSI, *Committee Hansard*, 15 February 2013, p. 20.

5 See, for example, Dr Andrew Burbidge, *Submission 46*, p. 2; Professor John Woinarksi, *Submission 48*, p. 5; NPA NSW, *Submission 145*, p. 6; Mr Brendan Sydes, ANEDO, *Committee Hansard*, 15 February 2013, p. 47; Port Campbell Community Group, *Submission 31*, p. 3; Ms Rachel Walmsley, ANEDO, *Committee Hansard*, 15 February 2013, p. 47; HSI, *Submission 88*, p. 3; BirdLife Australia, *Submission 82*, p. 10; Australasian Bat Society, *Submission 110*, p. 11.

6 ANEDO, *Submission 137*, p. 4; see also Minister for Environment and Heritage Protection Queensland, *Submission 130*, p. 4.

7 Mr Brendan Sydes, ANEDO, *Committee Hansard*, 15 February 2013, p. 47; BirdLife Australia, *Submission 82*, p. 10; ANEDO, *Submission 137*, p. 4.

already protected areas;⁸ and no listings in Tasmania.⁹ At the Commonwealth level, there have been only five critical habitat listings under the EPBC Act.¹⁰ The critical habitat provisions in the EPBC Act are limited in scope to protection of critical habitat in Commonwealth areas.¹¹

5.4 However, as noted in Chapter 1, the Hawke review recommended that the EPBC Act be amended to discontinue the critical habitat register. The Hawke review found that 'maintaining a separate register of critical habitat is unnecessary', suggesting instead that the critical habitat provisions could be used more effectively. The Hawke review stated that:

Identification of critical habitat during the development of recovery plans, threat abatement plans, conservation advice and regional plans would result in critical habitat being factored into decision-making under the Act and also raise community awareness of areas requiring protection.¹²

5.5 The Hawke review recommended that the EPBC Act be amended to require the identification of critical habitat for listed threatened species at the time of listing, and that the critical habitat register be discontinued once information about critical habitat has been included in listing documentation.¹³

5.6 Some suggested that the critical habitat provisions should be maintained and enhanced—for example, that listing should be made mandatory, rather than discretionary¹⁴ or that the public should be able to nominate critical habitat.¹⁵ HSI argued that critical habitat identified in recovery plans should be automatically included in the critical habitat register:

How hard can it be to transfer what has been identified in Recovery Plans across to the Register?...HSI has provided the Commonwealth with the data to allow it to list critical habitats for well over 60 species in the Register, but all our applications have been ignored.¹⁶

8 Ms Rachel Walmsley, ANEDO, *Committee Hansard*, 15 February 2013, p. 47; see also BirdLife Australia, *Submission 82*, p. 10; Nature Conservation Council of NSW, *Submission 134*, p. 2; ANEDO, *Submission 137*, p. 4.

9 Ms Rachel Walmsley, ANEDO, *Committee Hansard*, 15 February 2013, p. 47; see also BirdLife Australia, *Submission 82*, p. 10; ANEDO, *Submission 137*, p. 4.

10 SEWPAC, Register of Critical Habitat, at: <http://www.environment.gov.au/cgi-bin/sprat/public/publicregisterofcriticalhabitat.pl> (accessed 9 April 2013); see also HSI, *Submission 88*, pp 3 and 5; and Professor John Woinarski, *Submission 48*, p. 6.

11 EPBC Act, ss. 207B(1)(c) and s. 207C.

12 Hawke review, p. 156.

13 Hawke review, recommendation 12.

14 WWF-Australia, *Submission 81*, p. 2; HSI, *Submission 88*, pp 4–5; see also Ms Vanessa Bleyer, Lawyers for Forests, *Committee Hansard*, 20 February 2013, pp 24–25.

15 Nature Conservation Society of South Australia, *Submission 150*, p. 5; Mr Brendan Sydes, ANEDO, *Committee Hansard*, 15 February 2013, p. 47.

16 HSI, *Submission 88*, pp 3–4, see also p. 5.

5.7 HSI made a number of other suggestions to strengthen the legislative provisions for critical habitat, including, for example, prohibiting the minister from approving actions that cause detrimental impacts on critical habitat; and designating critical habitat as a matter of national environmental significance in its own right.¹⁷

5.8 As Ms Rachel Walmsley from ANEDO observed:

...at the moment, you can, for example, still approve a development that will impact critical habitat, be right in the middle of critical habitat. They can still be approved...It makes you ask: 'What is the point of identifying that critical habitat if it has absolutely no effect on how development decisions are made?'¹⁸

5.9 Dr Martin Taylor of WWF-Australia described the protection of critical habitat as a 'key failing of the legislation and funding arrangements that we have at the moment'.¹⁹ WWF-Australia compared the protection of critical habitat under the EPBC Act with endangered species legislation in the US:

The EPBC Act provides for a register of critical habitats, but this is discretionary, a serious deficiency in the Act. Under the US Endangered Species legislation, critical habitat designation and protection is obligatory. Research shows that designation of critical habitats under the US law has a significant additional benefit for species recovery over and above listing itself and recovery plans.²⁰

5.10 Dr Taylor explained that his research showed that critical habitat designation in the US 'has made a real difference in turning around species population declines'.²¹ He explained the US provisions in further detail:

...designating critical habitat is mandatory in the US, so when you list a threatened species you have a time period to do that but you also have to list the critical habitat—[this] has the effect that any federal action may not adversely modify that critical habitat. The important difference between that and just listing the species is...critical habitat includes not only those places the species currently occupies but also those places—and here is the beautiful logic of the act—that that species needs to re-occupy when it is in a phase of recovery and is expanding. The northern hairy-nosed wombat is confined to a little national park in Central Queensland, but that is not its critical habitat. Under the US thinking, critical habitat is the area that that

17 HSI, *Submission 88*, p. 5.

18 Ms Rachel Walmsley, ANEDO, *Committee Hansard*, 15 February 2013, pp 46–47.

19 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 21; see also Batwatch Australia, *Submission 139*, p. 8.

20 WWF-Australia, *Submission 81*, p. 4; see also, for example, CSIRO, *Submission 77*, p. 4.

21 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 25, citing Taylor M, Suckling KF, Rachlinkski JJ (2005) The Effectiveness of the Endangered Species Act: A Quantitative Analysis, *Bioscience* 55, 360–367; see also Associate Professor Mark Lintermans, *Submission 60*, p. 3.

species will need to be in tiptop condition, so it can expand into it and can recover to the point that it can be taken off the threatened species list.²²

5.11 SEWPAC advised that the definition of critical habitat under the EPBC Act is proposed to be amended so that:

...all elements of a species' habitat that are important to its ongoing persistence and resilience in a landscape and/or marine environments is captured. For a threatened species, this includes habitat required for the species to recover to levels that are viable in the long term considering current and known emerging threats.²³

5.12 HSI highlighted identification of critical habitat as a key issue and suggested that critical habitat maps be developed:

If we cannot identify those critical habitats then the conversation with developers becomes more difficult...The problem at the moment is that we do not have sufficient resources to do that adequately. That is what we need to tackle first. If we can get those resources and identify those habitats, that conversation with other users of the environment is easier.²⁴

5.13 SEWPAC explained the rationale for the government's agreement to the Hawke recommendation to discontinue the register of critical habitat:

This is principally because offences relating to critical habitat only apply in Commonwealth areas under the EPBC Act, and because the listing of areas outside of Commonwealth areas on the register does not offer legal protection. It was also noted that there is already appropriate protection for critical habitat through controls on activities that may have a significant impact on a protected matter. In addition, critical habitat on Commonwealth land will continue to be protected through the approval requirements on all activities involving Commonwealth land that are likely to have a significant impact [on the environment].²⁵

5.14 SEWPAC explained that the EPBC Act will be amended so that a description and location of critical habitat will be included in each conservation advice at the time of listing, and that this advice could be readily updated as new information becomes available.²⁶ Finally, representatives from SEWPAC also told the committee that the Hawke review had found that the register of critical habitat:

22 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 21.

23 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 16 [Q.15]; also SEWPAC, *Committee Hansard*, 15 February 2013, p. 65; CSIRO, *Submission 77*, p. 5.

24 Ms Alexia Wellbelove, HSI, *Committee Hansard*, 15 February 2013, p. 20; see also HSI, *Submission 88*, p. 5; Ms Sera Blair, *Submission 67*, p. 3; Batwatch Australia, *Submission 139*, p. 8.

25 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 16 [Question 015]; see also SEWPAC, *Committee Hansard*, 15 February 2013, p. 65.

26 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 16 [Question 015]; see also SEWPAC, *Committee Hansard*, 15 February 2013, p. 65.

...was not actually being terribly effective in providing protection for the important habitat for threatened species.²⁷

5.15 SEWPAC representatives advised that the department is 'strengthening our capacity to deal with habitat conservation as opposed to the much more narrowly cast species conservation...' through a range of activities, including the national wildlife corridor policy and 'the approach being taken in Caring for our Country; things like the Biodiversity Fund, with protecting and restoring habitats and managing invasive species'. They told the committee this is also designed to ensure 'that we preserve enough habitat in the landscape to give the biodiversity conservation outcomes that we are generally seeking'.²⁸

Importance of protected areas

5.16 Several submissions also expressed support for protection of critical habitat through protected areas such as National Parks and the National Reserve System, pointing to recent research which suggests that protected areas are an important measure for the protection of threatened species and communities.²⁹

5.17 For example, Professor Hugh Possingham and Associate Professor Michael McCarthy submitted that research shows that 'protected areas contribute to stabilising or recovering some threatened species'. At the same time they warned that 'there is increasing evidence of species declines within protected areas'.³⁰

5.18 Similarly, Dr Taylor told the committee that his research shows that:

...critical habitat protection through strong national legislation and new protected areas are the only things that show significant links to turnarounds in declines of threatened species, both in the United States and here. These should be the priorities for reform.³¹

5.19 Indeed, several submissions expressed support for the National Reserve System—'Australia's network of protected areas, conserving examples of our natural landscapes and native plants and animals.'³² The National Reserve System currently includes more than 9,700 protected areas covering 13.43% of Australia—over 103 million hectares. It is made up of Commonwealth, state and territory reserves, Indigenous lands and protected areas run by non-profit conservation organisations,

27 SEWPAC, *Committee Hansard*, 15 February 2013, p. 65.

28 SEWPAC, *Committee Hansard*, 15 February 2013, p. 65.

29 WWF-Australia, *Submission 81*, p. 7 and Attachment A; CSIRO, *Submission 77*, p. 4; ACF, *Submission 147*, p. 3; Professor Hugh Possingham and Associate Professor Michael McCarthy, *Submission 127*, p. 3; NPA NSW, *Submission 145*, p. 7; Nature Conservation Society of South Australia, *Submission 150*, p. 3; Minister for Environment and Heritage Protection Queensland, *Submission 130*, p. 4; Director of National Parks, *Submission 144*, p. 4.

30 Professor Hugh Possingham and Associate Professor Michael McCarthy, *Submission 127*, p. 3, citing Taylor, M. J. et al. "What works for threatened species recovery? An empirical evaluation for Australia" *Biodivers. Conserv.* 20, pp 767-777 (2011).

31 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 20.

32 SEWPAC, *Submission 143*, p. 10.

through to ecosystems protected by farmers on their private working properties (see Tables 6 and 7 below).³³

Table 6: Protected areas in Australia by governance³⁴

Governance	Number of protected areas	Total area (ha)	Average size (ha)	Percentage of Australia	Proportion of total protected area
Government	7 025	65 235 146	9 286	8.49%	63.15%
Indigenous	41	23 581 827	575 167	3.07%	22.83%
Joint	161	8 325 751	51 713	1.08%	8.06%
Private	2 492	6 156 226	2 470	0.80%	5.96%
Total	9 719	103 298 950	10 629	13.43%	100%

Table 7: Protected areas in Australia by jurisdiction³⁵

Region	Jurisdiction area (ha)	Number of protected areas	Protected areas (ha)	Average size (ha)	Per cent of jurisdiction protected	Per cent of NRS
ACT	235 813	45	129 530	2 878	54.93%	0.13%
EXT	N/A	22	60 163	2 734	N/A	0.06%
NSW	80 121 268	867	7 081 783	8 168	6.86%	8.84%
NT	134 778 762	105	14 795 437	140 909	14.32%	10.98%
QLD	172 973 671	1 073	11 505 188	10 722	11.14%	6.65%
SA	98 422 137	1 946	27 246 888	14 001	26.38%	27.68%
TAS	6 840 133	1 202	2 845 157	2 367	2.75%	41.60%

33 SEWPAC, *National Reserve System*, at: <http://www.environment.gov.au/parks/nrs/index.html> (accessed 30 July 2013); see also SEWPAC, *Submission 143*, p. 10; Director of National Parks, *Submission 144*, p. 4.

34 SEWPAC, Collaborative Australian Protected Area Database (CAPAD), *Terrestrial Protected Area Summary: 2010 National Summary*, at: <http://www.environment.gov.au/parks/nrs/science/capad/2010/index.html> (accessed 31 July 2013).

35 SEWPAC, CAPAD, *Terrestrial Protected Area Summary: 2010 National Summary*, at: <http://www.environment.gov.au/parks/nrs/science/capad/2010/index.html> (accessed 31 July 2013).

Region	Jurisdiction area (ha)	Number of protected areas	Protected areas (ha)	Average size (ha)	Per cent of jurisdiction protected	Per cent of NRS
VIC	22 754 364	2 897	3 991 600	1 378	3.86%	17.54%
WA	252 700 808	1 562	35 643 205	22 819	34.51%	14.10%
Australia	768 826 956	9 719	103 298 950	10 630	100%	13.43%

5.20 ACF described the National Reserve System as 'one of the most effective tools available for preventing mass extinction of native wildlife and degradation of ecosystems...The National Reserve System needs to be maintained, resourced and expanded'.³⁶ It was suggested that the National Reserve System will be increasingly valuable in the context of climate change.³⁷

5.21 Others expressed support for National Parks. For example, Wildlife Queensland described National Parks and protected areas as 'the cornerstone of biodiversity protection and conservation'.³⁸ The Save the Bilby Fund agreed that:

National Parks make a significant contribution to the protection and management of critical habitat for threatened species in Qld and the majority of these species have been recorded on the protected area estate. This is a great result. However the management of the park estate is also plagued by insufficient funding and it can sometimes be hard to manage multiple threatened species that have competing needs.³⁹

5.22 Marine parks and sanctuary zones were similarly noted as important mechanisms to protect critical habitat for marine species. For example, the National Parks Association of NSW remarked that, for marine species:

...marine parks and specifically marine sanctuary zones are a vital element of marine species and ecosystem conservation, as part of a broader, well-managed marine estate.⁴⁰

5.23 However, it was pointed out that of course habitat *protection* alone is not sufficient: habitat also needs to be *managed* appropriately.⁴¹ For example, WWF-Australia observed that:

36 ACF, *Submission 147*, p. 3.

37 The Wilderness Society, *Submission 129*, p. 3.

38 Wildlife Queensland, *Submission 76*, p. 2.

39 Save the Bilby Fund, *Submission 16*, p. 3.

40 NPA NSW, *Submission 145*, p. 7; see also Minister for Environment and Heritage Protection Queensland, *Submission 130*, p. 6.

41 Zoos Victoria, *Submission 42*, p. 3; Friends of Grasslands, *Submission 86*, p. 3; NPA NSW, *Submission 145*, p. 7; see also Director of National Parks, *Submission 144*, p. 10.

Even for critical habitats inside protected areas, the permanence, security and audit arrangements to ensure management effectiveness are more important issues than tenure.⁴²

5.24 Zoos Victoria pointed to the Yellingbo Nature Conservation Reserve in Victoria—where wild populations of Helmeted Honeyeaters and Leadbeater's possums occur (both listed as endangered under the EPBC Act⁴³). Zoos Victoria argued that although this is a protected area, it is not being managed effectively for either of these species and 'as a consequence, ongoing habitat degradation and the limited availability of high quality habitat are the major threats for both species'.⁴⁴

5.25 BirdLife Australia also expressed dissatisfaction with some aspects of habitat protection in protected areas. They suggested that there is too much focus on landscapes and general threats, which 'has diluted the emphasis on managing critical habitat for threatened species':

Thus Norfolk Island National Park is managed to reduce the density of cats and rats but without detailed management of the threatened species such as the Tasman Parakeet or the Norfolk Island Owl. Kakadu National Park has general fire management but no specific management for remnant populations of White-throated Grasswren or Yellow Chat. In fact there is almost no knowledge of where these species occur in the park. This attitude is also common in many state and territory parks.⁴⁵

5.26 BirdLife Australia recommended that specific actions for threatened species recovery, and management of critical habitat, should be incorporated into the management plans of all Commonwealth parks.⁴⁶

5.27 Dr Taylor of WWF-Australia expressed concern that:

Under Caring for Our Country, investments in new protected areas, whether government or private, by purchase or by conservation agreement under the National Reserve System program, has been about six times lower than it needs to be to meet this commitment.⁴⁷

5.28 He was further worried that the National Reserve System has been 'demoted' and 'stripped of its budget allocation in round two of Caring for Our Country'.⁴⁸ In response to these concerns, SEWPAC stated:

42 WWF-Australia, *Submission 81*, p. 5; Mr Philip Collier, *Submission 32*, p. 3.

43 See further Species Profile and Threats Database, at: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl> (accessed 12 March 2013).

44 Zoos Victoria, *Submission 42*, p. 3; see also Ms Rachel Lowry, ANEDO, *Committee Hansard*, 20 February 2013, p. 4.

45 BirdLife Australia, *Submission 82*, p. 9; see also Island Conservation, *Submission 20* for further discussion of issues on Norfolk Island and suggestions for improvements.

46 BirdLife Australia, *Submission 82*, p. 10.

47 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 20.

48 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 20; see also WWF-Australia, *Submission 81*, p. 2.

The strong progress towards achieving a comprehensive terrestrial National Reserve System under the first phase of Caring for our Country means that the priorities for investment through the second phase of Caring for our Country can now shift, from 2013–14, to place a greater emphasis on establishing and managing the marine component of the National Reserve System. In particular, initial funding has been committed to the implementation of management arrangements for the recently declared national network of Commonwealth marine reserves.⁴⁹

5.29 SEWPAC also told the committee that :

At the same time, the government has committed to continuing investment in the Indigenous Protected Areas program. This will build on the 36 million hectares currently protected in Indigenous Protected Areas, 15 million hectares of which has been achieved under the first phase of Caring for our Country.⁵⁰

5.30 Finally, SEWPAC advised that:

Limited funding may also be available for expanding the terrestrial component of the National Reserve System for projects which strongly meet the objectives and priorities set out within the One Land - Many Stories: Prospectus of Investment, although there will not be a specific allocation of program funding for this component.⁵¹

Habitat connectivity

5.31 The importance of connectivity of habitat was highlighted in some submissions.⁵² For example, Wildlife Queensland observed that conservation of migratory species 'requires planning for habitat protection over very large areas and between different jurisdictions and provision for free movement between areas of habitat'.⁵³ For this reason, they emphasised the importance of developing connecting areas between protected estates.⁵⁴

5.32 In this context, some submissions expressed support for the *National Wildlife Corridors Plan*.⁵⁵ SEWPAC explained that the *National Wildlife Corridors Plan*:

...is a further new landscape-scale initiative and collaborative approach for managing biodiversity. Supported by investment under Caring for our

49 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, [Q.19.]

50 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, [Q.19]; see also SEWPAC, *Submission 143*, p. 10.

51 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, [Q.19].

52 See, for example, Earth Learning Incorporated, *Submission 124*, p. 1.

53 Wildlife Queensland, *Submission 76*, p. 2.

54 Wildlife Queensland, *Submission 76*, p. 2; HSI, *Submission 88*, p. 3.

55 SEWPAC, *National Wildlife Corridors Plan: A framework for landscape-scale conservation*, 2012, available at: <http://www.environment.gov.au/biodiversity/wildlife-corridors/index.html> (accessed 16 April 2013); Colong Foundation for Wilderness, *Submission 43*, p. 5; CSIRO, *Submission 77*, p. 4.

Country and the Biodiversity Fund, it aims to improve the resilience of our landscapes in a changing climate and repair and reconnect landscapes that have become fragmented. It plans for a network of wildlife corridors across the nation, ranging from small corridors created by local communities to large corridors that stretch across many different landscapes. Creating a network of wildlife corridors, with adequate management of invasive species, should contribute substantially to the future protection of threatened species and ecological communities.⁵⁶

5.33 SEWPAC submitted that threatened species also receive protection through the protection of Ramsar wetlands, Commonwealth marine areas, world heritage properties and national heritage places. SEWPAC pointed to recent natural heritage listings which will provide 'substantial extra protection for many threatened species', including species on the Ningaloo Coast, in the Australian Alps and in the West Kimberley.⁵⁷

Protecting critical habitat outside protected areas

5.34 Some warned that protected areas alone are not enough.⁵⁸ In particular, it was suggested that protection of critical habitat on private land needs to be considered. For example, Professor Possingham and Associate Professor McCarthy advised that 13% of threatened species occur entirely outside protected areas and '80% of species do not have enough habitat protected for their survival'.⁵⁹ As Associate Professor McCarthy told the committee:

...current protected areas are not adequate for protecting all of Australia's threatened species...there needs to be a lot of thought about protecting species beyond protected areas as well as better management within protected areas.⁶⁰

5.35 Similarly, the Save the Bilby Fund stated that 'critical habitat also requires management on private property and other state lands'.⁶¹

5.36 For this reason, many submissions emphasised the importance of conservation agreements and covenants as mechanisms for the protection of critical habitat on private land.⁶² As Mr Philip Collier observed:

56 SEWPAC, *Submission 143*, p. 11.

57 SEWPAC, *Submission 143*, p. 4.

58 See, for example, Wildlife Queensland, *Submission 76*, p. 2; Nature Conservation Council of NSW, *Submission 134*, p. 2.

59 Professor Hugh Possingham and Associate Professor Michael McCarthy, *Submission 127*, p. 3.

60 Associate Professor Michael McCarthy, *Committee Hansard*, 20 February 2013, p. 28; see also BirdLife Australia, *Submission 82*, p. 10.

61 Save the Bilby Fund, *Submission 16*, p. 3.

62 See, for example, Mr Philip Collier, *Submission 32*, p. 2; CSIRO, *Submission 77*, p. 4; Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 23; Earth Learning Incorporated, *Submission 124*, p. 1; see also SEWPAC, *Submission 143*, p. 12.

...much critical habitat is in private hands, and the owners of any less-alienated remnants need to be engaged as conservation managers, or offered an opportunity to sell their land to conservation-minded new owners.⁶³

5.37 Mr Collier believed that:

...there is scope for private landholders to make a significant contribution to the care and protection of threatened species on their own land. We recommend that, with the endorsement of landholders and where requested, they are helped with surveys and then empowered to undertake their ongoing adaptive management, supported by relevant knowledge and management advice when requested. Voluntary land owners and managers should be fully appreciated for the efforts they provide, which is often much more intensive than can be provided by professionals in a resource constrained world.⁶⁴

5.38 Dr Taylor of WWF-Australia also discussed the importance of working with landholders:

.... to get a covenant over the portions of their property that are important for that threatened species, so that when that property is sold or that landowner changes their mind or their circumstances change, that covenant is still binding on that property.⁶⁵

5.39 Some suggested more funds are needed to help landholders covenant areas of high conservation value.⁶⁶ For example, Dr Taylor believed that we need to:

...greatly increase the money that is spent securing enduring outcomes, principally through covenants, not necessarily through just buying it, but principally through negotiating covenants. A lot of the natural resource management bodies, for example, could be spending their money actually securing covenants over properties. And this need not be solely for conservation of this little patch of habitat for this particular species. It can also be for conservation and land management, so that that land itself is managed in an enduring way—in a lasting way, complementary to conservation—so the production side of that property can also be managed better. And of course that could actually have production benefits, but it would surely have conservation benefits.⁶⁷

63 Mr Philip Collier, *Submission 32*, p. 3.

64 Mr Philip Collier, *Submission 32*, p. 4.

65 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 23.

66 Earth Learning Incorporated, *Submission 124*, p. 1.

67 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 23.

5.40 In this context, the committee notes that several submitters expressed support for the Environmental Stewardship Program.⁶⁸ SEWPAC explained that the Environmental Stewardship Program component of Caring for our Country:

...uses a market-based approach to enter into funding arrangements with private land managers to manage matters of national environmental significance listed under the EPBC Act. Since 2008, the Environmental Stewardship Program has resulted in the management and protection of over 58 000 hectares of five nationally threatened ecological communities on more than 580 sites on privately owned land. This includes 40 187 hectares of the critically endangered white box, yellow box, Blakely's red gum grassy woodland and derived native grasslands (known as box gum grassy woodland) which occurs in southern Queensland, New South Wales, Australian Capital Territory and Victoria. Ecological monitoring being undertaken by the Australian National University has also identified threatened species on a number of these sites.⁶⁹

5.41 SEWPAC further explained that the Environmental Stewardship Program component of Caring for Our Country 'supports private land managers for up to 15 years to manage matters of national environmental significance listed under the EPBC Act'.⁷⁰

5.42 SEWPAC also noted in its submission that landowners may be eligible for tax deductions and/or concessional capital gains tax treatment as a result of permanently protecting environmental values of high significance or quality.⁷¹

Ecosystems of national significance

5.43 Another mechanism with potential for protecting critical habitat might be the proposal for 'ecosystems of national significance' as a new matter of national environmental significance.

5.44 Indeed, several submissions supported the Commonwealth government's proposal for a new matter of national environmental significance under the EPBC Act for 'ecosystems of national significance'.⁷² ACF suggested this was particularly important in the context of climate change (the issue of climate change is discussed further in Chapter 4 of this report).⁷³

5.45 SEWPAC submitted that the proposal for 'ecosystems of national significance' is 'aimed at better integrating the conservation of ecosystems into development

68 Mr Deborah Kerr, NFF, *Committee Hansard*, 15 February 2013, p. 1; see also Ms Claire Parkes, Wentworth Group of Concerned Scientists, 15 February 2013, p. 36.

69 SEWPAC, *Submission 143*, p. 9.

70 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 18 [Q.17].

71 SEWPAC, *Submission 143*, p. 12.

72 ACF, *Submission 147*, p. 3; Zoos Victoria, *Submission 42*, p. 2; see also SEWPAC, *Submission 143*, p. 7.

73 ACF, *Submission 147*, p. 3.

planning and environmental assessment processes'.⁷⁴ SEWPAC also submitted that it is increasingly using 'landscape wide' strategic assessments and bioregional planning 'to identify important areas of habitat for threatened species and ecological communities as part of the development assessment process'.⁷⁵

5.46 However, the Australasian Bat Society observed:

Critical habitat can be a relatively minor and restricted feature of the landscape, and broadscale approaches to management may not adequately address these. For example, installing and maintaining bat-friendly gates on old mines is a specific action that would address protection of critical roost sites very effectively, but such actions have been ignored or implemented haphazardly and not maintained.⁷⁶

Committee view

5.47 The committee recognises the fundamental importance of the identification and protection of critical habitat to the survival of threatened species and ecological communities. The committee is therefore disappointed at the failure of all Australian jurisdictions to clearly identify and adequately protect critical habitat. This was in marked contrast to the evidence received of the success of the US *Endangered Species Act* in protecting critical habitat.⁷⁷

5.48 The committee supports the recommendations of the Hawke review that there is no need to continue the register of critical habitat under the EPBC Act. The committee notes that the Hawke review found that the register was not 'terribly effective'.⁷⁸ Instead, the description and location of critical habitat should be identified at the time of listing for each threatened species and ecological community, and in the relevant conservation advice or action plan for that species.

Recommendation 22

5.49 The committee recommends that the *Environment Protection and Biodiversity Conservation Act 1999* be amended to require the identification of critical habitat for listed threatened species and ecological community at the time of listing.

5.50 The committee notes SEWPAC's evidence that 'there is already appropriate protection for critical habitat through controls on activities that may have a significant impact on a protected matter'.⁷⁹ However, the committee considers that there is a need for critical habitat to be clearly identified and information about that critical habitat to

74 SEWPAC, *Submission 143*, p. 8.

75 SEWPAC, *Submission 142*, p. 1.

76 Australasian Bat Society, *Submission 110*, p. 12, see also p. 16.

77 WWF-Australia, *Submission 81*, p. 4; Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 21.

78 SEWPAC, *Committee Hansard*, 15 February 2013, p. 65.

79 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 16 [Q.15].

be made readily available and easily accessible. The committee considers that this will increase certainty for all stakeholders, including development proponents, and also improve protection of that critical habitat.

5.51 The committee notes that the description and location of critical habitat is included in each conservation advice at the time of listing. Further, many existing recovery plans—at all levels of government—also identify critical habitat. However, there is a need to ensure that information about critical habitat is easily accessible, rather than scattered throughout various plans and advices. The committee therefore recommends that all critical habitat for threatened species, as identified in Commonwealth, state and territory recovery plans and conservation advices, be compiled into easily accessible maps, readily available online and updated at regular intervals. This will provide a clear source of information to all stakeholders, to ensure they are informed of key areas where projects might be needed to support threatened species or ecological communities; where initiatives to tackle threatening or invasive species could be targeted; and to inform potential development proposal processes.

Recommendation 23

5.52 The committee recommends the Department of Sustainability, Environment, Water, Population and Communities ensure that all critical habitats for threatened species and ecological communities, as identified in Commonwealth, state and territory recovery plans and conservation advices, be compiled into easily accessible maps which are readily available online and updated at regular intervals.

5.53 The committee also recognises the evidence of the importance of the protected area estate in providing protection of critical habitat for many species and communities. At the same time, the committee notes with some concern the evidence suggesting that the management of some protected areas may not be adequate. For example, the failure to eliminate feral animals such as rats and cats from Norfolk Island, particularly Norfolk Island National Park, is a concerning example of the lack of effective management of invasive species in that area.

5.54 Commensurate with the need to better identify critical habitat, the committee believes that the relative value and contribution of land within the National Reserve System to supporting threatened species needs to be better understood. Where targeted to building on critical habitat supporting threatened species, the committee supports the National Wildlife Corridors Plan, particularly for the protection of habitat connectivity. The committee also notes the need for critical habitat protection on private lands, and the evidence of the importance of conservation covenants and the Environmental Stewardship Program in this regard.

Recommendation 24

5.55 In light of the important contribution it should make to the protection of habitat for threatened species and ecological communities, the committee recommends that an audit be undertaken to identify all critical habitat within the National Reserve System.

Recommendation 25

5.56 The committee recommends that the Environmental Stewardship Program be maintained in order to continue to provide assistance to private land managers to manage and protect habitat for threatened species and ecological communities on their land.

Other issues

5.57 Other issues raised during the committee's inquiry included the role of the:

- private sector; and
- broader community, including the need for wide-ranging cooperation.

Role of the private sector

5.58 The committee received considerable evidence during its inquiry supporting the important and increasing contribution of the private sector. This included zoos and other private conservation organisations managing private reserves and captive breeding programs.⁸⁰ The role of private nurseries in collecting and propagating threatened plants was also noted.⁸¹

5.59 One of the most heartening success stories received by the committee was from the Australian Wildlife Conservancy (AWC), which told the committee it protects over 80 per cent of the bird species in Australia and about two-thirds of all native mammal species.⁸² In particular, AWC protects 73 species of mammals, birds, reptiles and amphibians listed as threatened under the EPBC Act. And as noted in Chapter 4, AWC's feral free Scotia Wildlife Sanctuary has seen a substantial increase in several nationally threatened species, including greater bilbies, bridled nail-tail wallabies, numbats, burrowing bettongs and woylies.⁸³

5.60 Mr Atticus Fleming from the AWC suggested that:

...a broader acknowledgment is needed that non-government entities—and I am talking about organisations like AWC, but I am also talking about Indigenous ranger groups and, in some cases, pastoralists and other landholders—are often in the best position to provide really cost-effective,

80 Save the Bilby Fund, *Submission 16*, p. 3; Zoo and Aquarium Association, *Submission 27*, p. 2; Australian Wildlife Conservancy, *Submission 162*; Mr Kevin Bradley, Save the Bilby Fund, *Committee Hansard*, 22 February 2013, p. 4; Mr Nigel Sharp, *Submission 59*; Greenfleet, *Submission 94*; Wildlife Queensland, *Submission 76*, p. 4; see also Mr Barry Rowe, Candlebark Community Nursery, *Submission 95*; Finch Society of Australia, *Submission 37*; Mr Greg Miles, *Submission 72*, p. 8; BirdLife Australia, *Submission 82*, p. 10.

81 Earth Learning Incorporated, *Submission 124*, p. 1; Mr Barry Rowe, Candlebark Community Nursery, *Submission 95*.

82 Mr Atticus Fleming, Australian Wildlife Conservancy, *Committee Hansard*, 22 February 2013, p. 19.

83 Australian Wildlife Conservancy, *Submission 162*, p. 4.

practical action on the ground. That is where we are going to generate the wins for threatened species.⁸⁴

5.61 Mr Fleming acknowledged that:

Government is always going to have a critically important role to play. If government can be better at working out how to get investment out into the field in a way that empowers private conservation groups, Indigenous ranger groups and landholders to deliver—within the right kind of accountability framework—the practical action that needs to happen, then I think we will have more bilbies, more bettongs and more Gouldian finches for the available dollars if we can do that.⁸⁵

5.62 The National Parks Association of NSW (NPA NSW) also observed that:

...there are now dozens of organisations, along with countless individuals, including thousands of primary producers, across Australia that are dedicated to long-term stewardship of land for nature conservation and the provision of sustainable environments. Approaches range from property-based management activities with no formal agreements, to the management of land through a legal covenant, to the acquisition and management of land specifically for the purpose of nature conservation. These approaches need support, and with that support the public benefit would be greatly enhanced.⁸⁶

5.63 The NPA NSW suggested that:

...tax concessions and reforms could greatly assist the further protection of Australia's unique flora and fauna on private land through increased philanthropic activity.⁸⁷

5.64 SEWPAC noted in its submission that landowners may be eligible for tax deductions and/or concessional capital gains tax treatment as a result of permanently protecting environmental values of high significance or quality.⁸⁸

5.65 In this context, the committee notes once again the support expressed for the Environmental Stewardship Program,⁸⁹ as discussed in Chapter 3 of this report.

84 Mr Atticus Fleming, Australian Wildlife Conservancy, *Committee Hansard*, 22 February 2013, p. 21.

85 Mr Atticus Fleming, Australian Wildlife Conservancy, *Committee Hansard*, 22 February 2013, p. 21.

86 NPA NSW, *Submission 145*, p. 11.

87 NPA NSW, *Submission 145*, p. 10; see also Mr Greg Miles, *Submission 72*, p. 10.

88 SEWPAC, *submission 143*, p. 12.

89 Mr Deborah Kerr, NFF, *Committee Hansard*, 15 February 2013, p. 1; see also Ms Claire Parkes, Wentworth Group of Concerned Scientists, *Committee Hansard*, 15 February 2013, p. 36.

Captive breeding programs

5.66 The importance of captive breeding programs was also highlighted for the committee by a number of submissions and witnesses.⁹⁰ For example, Zoos Victoria told the committee that native threatened species were a priority for them and that it:

...has extensive experience in the field of native threatened species recovery, with captive-breeding programs spanning two decades for several species. Our investment in threatened species recovery currently amounts to approximately 2.5 million dollars per annum.⁹¹

5.67 Zoos Victoria also told the committee that, following its experience with the Christmas Island pipistrelle (as outlined in Chapter 3), they conducted a study on which species were likely to go extinct in the next 10 years in Victoria. They came up with a priority list of 16 native threatened species upon which to focus efforts and resources.⁹² They told the committee that, for example:

The mainland Eastern Barred Bandicoot would be extinct if it were not for the breeding and release program undertaken by Melbourne Zoo. Similarly Victoria's bird emblem, the Helmeted Honeyeater would almost certainly be extinct if it were not for the breeding and release program undertaken by Healesville Sanctuary. Lastly, the Orangebellied Parrot is predicted to go extinct in the wild within the next five years, its survival now resting on a large insurance population established in captivity.⁹³

5.68 They concluded that recovery of these Victorian species relies on successful captive-breeding and release programs. At the same time, they noted that, although breeding programs for these species have been in place for 20 years, 'wild populations for each species are still at risk'.⁹⁴

5.69 Zoos Victoria told the committee that captive intervention comes at 'enormous cost' and that 'the costs are carried by the zoos at the moment':

...we need to be more realistic, especially with this next wave of extinction that we are being warned we are facing, and to make sure that captive interventions are also funded accordingly, because it is not cheap and if you are going to do it properly it needs to receive adequate funding.⁹⁵

5.70 Zoos Victoria also highlighted the important educational and awareness-raising role of zoos. For example, the committee was told that 1.9 million people come through the gates at Zoos Victoria and research showed that 'zoos are

90 See, for example, Zoos Victoria, *Submission 42*; Finch Society of Australia, *Submission 37*, pp 2–3; BirdLife Australia, *Submission 82*, p. 7; see also Mr Greg Miles, *Submission 72*.

91 Zoos Victoria, *Submission 42*, p. 1.

92 Ms Rachel Lowry, Director, Zoos Victoria, *Committee Hansard*, 20 February 2013, p. 1; Zoos Victoria, *Submission 42*, p. 1.

93 Zoos Victoria, *Submission 42*, p. 1.

94 Zoos Victoria, *Submission 42*, p. 1.

95 Ms Rachel Lowry, Zoos Victoria, *Committee Hansard*, 20 February 2013, p. 6.

very influential in getting community behaviour to change'.⁹⁶ Zoos Victoria expressed the view that:

Zoos have a vital role to play in not only raising the profile of threatened species programs but also influencing conservation sensitive attitudes, knowledge and behaviours. Zoos Victoria's visitors and members now far exceed the membership numbers of any other conservation organization in Victoria (with more than 120,000 members). Recovery efforts that harness the reach of organization such as zoos to drive social changes that compliment environmental strategies are welcomed by our organization because human behavio[u]rs drive many of the processes threatening wildlife.⁹⁷

Role of community

5.71 The committee also heard about the importance of landholders, community groups and community volunteers in range of areas relating to threatened species, particularly in the development of recovery plans and conducting on-ground threatened species work.

5.72 As the Director of National Parks observed 'the protection, conservation and recovery of ecosystems and native species will increasingly rely on cooperation between stakeholders, both within and outside protected area systems'.⁹⁸ The Director of National Parks also emphasised the 'value of strong partnerships with scientists and research institutions' to continue to improve our understanding of the systems that we manage.⁹⁹

5.73 The Queensland government told the committee that it is:

...looking to encourage communities, landholders, NGO's, NRM bodies and corporate entities to play a much greater role in threatened species protection and recovery. In most cases, it is not government that is making the day to day decisions resulting in threats to a species and it is therefore relevant for government to partner with those decision makers to develop an appropriate mix of policy, regulation and practice to achieve a sustainable outcome.¹⁰⁰

5.74 As Dr Tanzi Smith observed, 'community organisations and volunteers undertake countless hours of weeding, planting, raising awareness and looking after their local area'.¹⁰¹

96 Ms Rachel Lowry, Director, Zoos Victoria, *Committee Hansard*, 20 February 2013, p. 1.

97 Zoos Victoria, *Submission 42*, p. 3; see also Zoo and Aquarium Association, *Submission 27*, p. 2; Save the Bilby Fund, *Supplementary Submission 16*.

98 Director of National Parks, *Submission 144*, p. 10.

99 Mr Peter Cochrane, Director of National Parks, *Committee Hansard*, 15 February 2013, p. 70.

100 Minister for Environment and Heritage Protection Queensland, *Submission 130*, p. 10.

101 Dr Tanzi Smith, *Submission 103*, p. 2; see also Regent Honeyeater Project, *Submission 12, Attachment 1*.

5.75 The NPA NSW acknowledged the role of 'citizen science'—that is, data collection about threatened species by trained community volunteers. They cited the example of the substantial collection of data about birds, including threatened birds, collected by BirdLife Australia's volunteer network.¹⁰²

5.76 BirdLife Australia itself observed that successes in relation to threatened species and ecological communities are often thanks to the 'sustained commitment of key individuals, either belonging to government agencies, non-government organisations or voluntary groups'.¹⁰³ They felt that government should 'provide strong support of non-government organisations and community groups that are actively involved in conservation of threatened species'.¹⁰⁴

5.77 The importance of engaging Indigenous communities was also emphasised in some submissions.¹⁰⁵ Professor John Woinarski observed that:

Some recovery plans have proven to be remarkably effective catalysts for delivering social outcomes in addition to environmental outcomes.¹⁰⁶

5.78 In this context, Professor Woinarski described the recovery plan for the warru, or black-footed rock-wallaby, as 'inspirational':

...in its recognition that in remote (and in this case, Indigenous) Australia, recovery plans aimed at the maintenance of threatened species provides an opportunity for employment, and restoration and showcasing of cultural strength; and that these social and environmental factors may be indissolubly linked.¹⁰⁷

5.79 However, Ms Sera Blair felt there is not enough support for some community groups:

Funding for current on ground conservation efforts for Leadbeater's possum has had to come from community groups like Friends of Leadbeater's possum through fundraising. This fundraising is done through community donations, sausage sizzles and grants. Government grants can be useful but they generally do not cover support for employees or equipment...community groups are left on their own to implement complex projects and this is unacceptable.¹⁰⁸

5.80 Unfortunately, the committee also heard that community work can often be undermined. ANEDO told the committee:

102 NPA NSW, *Submission 145*, pp 3–4.

103 BirdLife Australia, *Submission 82*, p. 7.

104 BirdLife Australia, *Submission 82*, p. 7.

105 Professor John Woinarski, *Committee Hansard*, 7 March 2013, p. 3; also Dr Andrew Burbidge, *Committee Hansard*, 7 March 2013, p. 6.

106 Professor John Woinarski, *Submission 48*, p. 4.

107 Professor John Woinarski, *Submission 48*, p. 4.

108 Ms Sera Blair, *Submission 67*, p. 3.

We have calls to EDO saying, 'I've been in my local reveg group for 20 years. We've weeded this bit of bushland, however, it's now a major project development and it's being cleared'. The planning laws of New South Wales will just say, 'Well, we've considered that but we've decided this development is going ahead'. ...then the good work that is done can still have a freeway built through it.¹⁰⁹

5.81 As ANEDO observed:

There is no point in spending public money and having people volunteer their time and the use of their land and so forth to achieve certain things only to find that it is undermined somewhere else because someone has permission to do something that is completely in the opposite direction.¹¹⁰

5.82 Finally, BirdLife Australia made the following interesting observation:

Many threatened species occur in rural, remote or regional areas with lower levels of income and higher levels of disadvantage than urban areas. There is a major opportunity to consider threatened species funding as part of portfolios of support for regions that have both threatened species needing management and qualify for other forms of support. The flow-on effects of employment in threatened species management are likely to be far greater in the smaller economies of rural and remote areas than urban areas while involvement of land managers in threatened species research is one of the most effective means of transforming land practice.¹¹¹

Committee view

5.83 The committee welcomes the evidence from many organisations, such as—to name but a few—the Australian Wildlife Conservancy, Zoos Victoria, BirdLife Australia and the Save the Bilby Fund, who are working hard to deliver and achieve on-ground outcomes for threatened species and ecological communities.

5.84 The committee particularly commends the work of the Australian Wildlife Conservancy and its impressive record of successful management of areas protecting a large number of threatened species, as well as its success in achieving substantial increases in the numbers of several nationally threatened species.¹¹² The committee recommends that SEWPAC assess the success of private conservation organisations in establishing sanctuaries of critical habitat for threatened species to examine and establish any lessons that could be applied across the National Reserve System. SEWPAC should also examine how and whether such private conservation organisations could play an effective role in improving outcomes for threatened species, including within publicly owned assets within the National Reserve System.

109 Ms Rachel Walmsley, ANEDO, *Committee Hansard*, 15 February 2013, p. 48.

110 Mr Brendan Sydes, ANEDO, *Committee Hansard*, 15 February 2013, p. 48.

111 BirdLife Australia, *Submission 82*, p. 16.

112 Australian Wildlife Conservancy, *Submission 162*; Mr Atticus Fleming, AWC, *Committee Hansard*, 22 February 2013, p. 21.

Recommendation 26

5.85 The committee recommends that the Department of Sustainability, Environment, Water, Population and Communities assess the success of private conservation organisations in establishing sanctuaries of critical habitat for threatened species to examine what lessons could be applied across the National Reserve System and how such private organisations could play an effective role in improving outcomes for threatened species, including within publicly owned assets within the National Reserve System. Such a role must be in cooperation with and following consultation with public land managers.

5.86 The committee also acknowledges the need to engage the wider community in the protection and management of threatened species and ecological communities. Indeed, the committee heard that many of the success stories in saving threatened species arose from the sustained commitment of key individuals, either belonging to government agencies, non-government organisations or voluntary groups.

5.87 The committee wishes to particularly recognise and commend landholders and community volunteers for their work on the ground with threatened species and ecological communities. The committee considers that, without these efforts, threatened species and ecological communities in Australia would be in a far worse state.

Recommendation 27

5.88 The committee recommends that the Commonwealth government continue to support the important contribution of all sectors of the community, including private sector and non-government organisations, landholders and community volunteers, in delivering outcomes for threatened species and ecological communities.

