

Photos in the Field: Reflecting on Environmental Change Through Photo-elicited Oral Histories

LILIAN M. PEARCE

Lilian Pearce is an interdisciplinary environmental studies practitioner and scholar living on Taungurung country, Australia. She is a lecturer in environmental humanities at La Trobe University and a research fellow with the University of Tasmania and RMIT.

This paper presents research located at the intersection of oral history, photography and environmental history to contribute to the growing role of the humanities in ecological fields. It explores the possibilities at the relationship between oral narrative, image and place. Research with the Wilkinson family of ‘Montreal’ in the Monaro region of New South Wales is used to demonstrate methodology that brings forward local place and environmental change that is often present, though backgrounded, in oral history research. Family photographs act as windows to insight and reflection on changing ecologies and relationships with place. A technique of conducting interviews in the field, and revisiting historic photography points, provides opportunities for the local place – through the presence and absence of species, the warped wire of old fences, the sights, sounds, textures and smells – to participate in historical understanding and future reimagining. Oral history work is central to assisting land managers to make sense of environmental change and degradation. It also facilitates place-based opportunities for healing. The work is framed around a desire to understand the past to inform restorative activities and wider cultural recuperations in a settler-colonial context.

INTRODUCTION

Studies that combine oral and environmental history have been surprisingly few and far between.¹ Some of the leading examples of their shared enrolment in research have been conducted by Australian scholars.² Existing works demonstrate that the capacity for oral and environmental histories to work together is strong, and indeed, critical, amidst the current ecological and climate crisis. Historian Karen Twigg argues that oral history is central to ‘illuminating the attitudes and perceptions, feelings and emotions that shape our responses to environment’.³ An important shared task of the two sub-fields of history is their capacity to challenge and rewrite hegemonic historical narratives and to document the experience of the past to inform more just and inclusive futures.

Yet research methods at the intersection of oral and environmental history are still being developed. In their work with Aboriginal people, graziers and immigrant American cotton farmers, Heather Goodall and Damian Lucas ‘grappled with’ ‘how to encourage people to speak about the environment of their memories’.⁴ They found ‘it was far more productive with all three groups to talk about what they did on land and rivers – camping, planting, mustering, fishing – and then to ask what it was like when they did it’.⁵ Twigg outlines a ‘loose life history frame-work, encouraging interviewees to speak of key events in their own life and that of their farm while remaining particularly attentive to the way in which the environment appeared in

1 Karen Twigg, “‘Another Weed Will Come Along’: Attitudes to Weeds, Land and Community in the Victorian Mallee”, in Katie Holmes and Heather Goodall (eds), *Telling Environmental Histories* (New York: Palgrave MacMillan, 2017), 213–40. As Twigg explains, the fields of historical geography and ecology have often been more active in turning to oral history to understand human/environment interactions.

2 For example see Tom Griffiths and Christine Hansen, *Living with Fire: People, Nature and History in Steels Creek* (Collingwood: CSIRO Publishing, 2012); Deb Anderson, *Endurance: Australian Stories of Drought* (Collingwood: CSIRO Publishing, 2014); Katie Holmes and Heather Goodall (eds), *Telling Environmental Histories*; Richard Broome, Charles Fahey, Andrea Gaynor and Katie Holmes, *Mallee Country: Land, People, History* (Melbourne: Monash University Publishing, 2019). Environmental history scholarship in Australia has had to be innovative and creative, as it is ‘brought into being by a settler culture’s slow and fitful adaptation to a unique ecology and a profoundly Aboriginal place’ (Tom Griffiths, ‘Environmental History, Australian Style’, *Australian Historical Studies* 46, no. 2 (2015): 167).

3 Twigg, “‘Another Weed Will Come Along’”, 228.

4 Heather Goodall, ‘Rivers, Memory and Migrancy: Everyday Place-Making in Changing Environments’, in *Telling Environmental Histories*, 31.

5 Goodall, ‘Rivers, Memory and Migrancy’, 32.

such narratives'.⁶ This paper expands on such methods through the use of photographs and field work. The recognised sensorial capacities of photographs are heightened by conducting oral histories in the land, engaging multi-species stories that bring past and present into vivid conversation.⁷ It does not seek to articulate comprehensive life stories of individuals, rather, it seeks to combine the techniques and strengths of oral history, photo-elicited interviewing and field work to help in understanding and negotiating past, present and future environmental relationships.⁸

The research is situated in the context of a private family farm in the Monaro, New South Wales. To understand the ongoing legacies of local environmental histories and opportunities for place-based adaptation to change we need to turn to 'personal experience and oral tradition'.⁹ Management decisions are complicated, personal and emotional.¹⁰ 'The whole context of a person's life', writes historian Rebecca Jones on drought, 'their family, environment, economic situation, community, personality and gender, as well as the period in which they farmed, creates circumstances for adaptation';¹¹ as Deb Anderson explains, 'Oral history lends an appreciation of both how events affected people then and how the recollection affects them now'.¹²

6 Twigg, "Another Weed Will Come Along", 216.

7 For the sensory role of photographs, see Lynda Mannik, 'Remembering, Forgetting, and Feeling with Photographs', in Alexander Freund and Alistair Thomson (eds), *Oral History and Photography* (New York: Palgrave MacMillan, 2011), 77–95. Recent developments in oral history in conversation with place are found in Debbie Lee and Kathryn Newfont (eds), *The Land Speaks: New Voices at the Intersection of Oral and Environmental History* (Oxford: Oxford University Press, 2017). As Thom van Dooren explains, it is within 'multispecies entanglements that learning and development take place, that social practices and cultures are formed'. Thom van Dooren, *Flight Ways: Life and Loss at the Edge of Extinction* (New York: Columbia University Press, 2014), 4.

8 As a participant in this work, my interpretation of these images and contextualisation of environmental change is very much present in the research. It is a combination of, as Alexander Freund and Alistair Thomson write, 'what is depicted in the picture, but also in how the producer depicted it, and how the interviewee as well as the interviewer use it' (Freund and Thomson, 'Introduction: Oral History and Photography', *Oral History and Photography*, 3).

9 Libby Robin, 'Radical Ecology and Conservation Science: An Australian Perspective', *Environment and History* 4, no. 2 (1998): 89. See also W.K. Hancock, *Discovering Monaro: A Study of Man's Impact on His Environment* (Cambridge: Cambridge University Press, 1972), 59.

10 Rebecca Jones, *Slow Catastrophes: Living with Drought in Australia* (Clayton: Monash University Publishing, 2017), xvi. See also Katie Holmes, Andrea Gaynor and Ruth Morgan, 'Doing Environmental History in Urgent Times', *History Australia* 17, no. 2 (2020): 239.

11 Jones, *Slow Catastrophes*, xxiii.

12 Anderson, *Endurance*, 59.

Understanding personal experiences is ever-more necessary given the significance of private family farms to the future of Australian ecosystems. While oral history is well versed in private lives, the interest in conservation in private land was largely overlooked in Australia until the 1990s.¹³ A study in 2010 by prominent Australian ecologists demonstrated that 80 per cent of threatened species occur outside Australia's national reserve system and 12 per cent occur in areas with no protection status.¹⁴ Agricultural land accounts for approximately 60 per cent of the Australian continent.¹⁵ As Jones points out, 90 per cent of Australian farming properties are still run by family-owner operators. With 410 million hectares of Australia occupied by agricultural practices, farmers, their practices, memories, knowledge and affection for place remain essential for the natural and social environment.¹⁶

PHOTOGRAPHY IN ORAL HISTORY AND ECOLOGICAL RESEARCH

Photographs convey much about the people, places and perspectives captured and are popular primary research tools in historical studies, as 'documents of social history and as mnemonic devices'.¹⁷ Personal photographs widen classical data sets and broaden histories. They provide opportunities for reflections on ecological change, farming practices and ideas of settler belonging because they are framed, captured and revisited from a particular viewpoint in time and space. As Ruth Ford writes,

13 Libby Robin, Chris Dickman and Mandy Martin (eds), *Desert Channels: The Impulse to Conserve* (Melbourne: CSIRO Publishing, 2010), 80. The inclusion of both recognised Indigenous land and private (non-Indigenous owner) land has only come into the formal conservation picture in more recent history, as the matrix between crown reserves became valued for biodiversity conservation. Private land is increasingly brought into the conservation space, as is the trend in much of Europe and the United States. See also Stefan Hajkowicz, 'The Evolution of Australia's Natural Resource Management Programs: Towards Improved Targeting and Evaluation of Investments', *Land Use Policy* 26, no. 2 (April 2009): 471–8.

14 James E.M. Watson, Megan C. Evans, Josie Carwardine, Richard A. Fuller, Liana N. Joseph, Daniel B. Segan, Martin F.J. Taylor, R.J. Fensham and Hugh P. Possingham, 'The Capacity of Australia's Protected-area System to Represent Threatened Species', *Conservation Biology* 25, no. 2 (2010): 324–32.

15 Hajkowicz, 'The Evolution of Australia's Natural Resource Management Programs', 471.

16 Jones, *Slow Catastrophes*.

17 Freund and Thomson, 'Introduction: Oral History and Photography', 3; Mannik, 'Remembering, Forgetting, and Feeling with Photographs'; Donald A. Ritchie, *Doing Oral History: A Practical Guide* (Oxford: Oxford University Press, 2003). In *Oral History and Photography*, Alexander Freund and Alistair Thomson explore the 'photographic turn' in oral history research: through the use of photographs in historians' research in the 1960s, its popularity in the 1970s, and its critical evaluation through which photographs in oral history have since become a category of analysis in themselves (Freund and Thomson, 'Introduction: Oral History and Photography').

family photo albums of land settlement can be read as ‘both evidence of environmental change and a form of storytelling about the transformation of the land’.¹⁸

Recent scholarship in oral history methodology examines the use of photographs as prompts for memory, positing that photographs are not uncomplicated windows into the past, rather, they are images that hold within them multiple meanings, contexts and exclusions.¹⁹ Of course, photographic albums have ‘notable absences’ and ‘silences’.²⁰ The use of family albums has been charged with being an incomplete representation of the past as they curate, construct and omit images, making interpretation difficult.²¹ However, the focus of the photograph in this research is the environment and relationships with it; that which at the time was often the unintended backdrop, meaning greater representation of the ‘hard times’ may remain present.

In family photographs the boundaries between professional and personal, between people and nature, are softened. The subjectivity of oral histories and photographs here is a strength. Photographs are employed in this research with the understanding that they are not analogues of reality, rather they are a rich archive through which the environmental relationships of a particular time and place can be made visible, and through which multiple possible pasts, presents and futures can be imagined.²²

Photography has also long been employed in long-term ecological research as a tool to document change over time.²³ Ecologists have been conducting formal long-term

18 Ruth Ford, ‘Mallee Residues: A Family Photograph Album from Southern Australia’, *Rachel Carson Centre Perspectives*, no. 2 (2017): 102.

19 Alexander Freund and Angela Thiessen, ‘Mary Brockmeyer’s Wedding Picture: Exploring the Intersection of Photographs and Oral History Interviews’, in Alexander Freund and Alistair Thomson (eds), *Oral History and Photography*, 27–44; Mannik, ‘Remembering, Forgetting, and Feeling with Photographs’; Freund and Thomson, ‘Introduction: Oral History and Photography’.

20 Ford, ‘Mallee Residues’, 105. See also Ana Maria Mauad, ‘Committed Eye: Photographs, Oral Sources, and Historical Narrative’, *Oral History and Photography*, 223–38.

21 Marjorie L. McLellan, *Six Generations Here: A Farm Family Remembers* (Madison, Wisconsin: Historical Society of Wisconsin, 1997).

22 For a strong example of the study exploring the intersection of photographs and environmental history see Joan M. Schwartz, ‘On Photographic Reflections: Nature, Landscape, and Environment’, *Environmental History* 12, no. 4 (October 2007): 752–79.

23 See Jon M. Skovlin, Gerald S. Strickler, Jesse L. Peterson and Arthur W. Sampson, ‘Interpreting Landscape Change in High Mountains of Northeastern Oregon from Long-Term Repeat Photography’, *General Technical Report PNW-GTR* (Portland, OR: U.S. Department of Agriculture, Forest (continued over page)

ecological research projects since their inception in the USA in 1980.²⁴ Because, as American ecologist Timothy Kratz and others have written, ‘understanding long-term ecological interaction at multiple spatial and temporal scales is difficult or, in some cases, impossible without a foundation of long-term observations’.²⁵ This is of particular importance in Australia, where ecologies are typified by variation that requires a long-term perspective for ecological understanding. Australia has a developing network of long-term ecological research projects, though has much further to come in both activities and funding to support research.²⁶ As ecologist Andrew Trant and others explain, ‘historical images have value for ecologists who wish to understand past landscape patterns, ecological and human legacies, and changes in abiotic, biotic, and cultural processes over time’.²⁷ Indeed, as Alexander Freund and Alistair Thomson write, ‘personal photographs, hitherto stored away in albums and shoe boxes’, may be a wealth of ‘historical evidence’.²⁸

Yet ecological change and species migration ask something else of historical studies. The role of history in environmental management is changing, demanding a wider engagement with the cultures and causes of degradation, and opportunities for

Service, Pacific Northwest Research Station, 2001), iii, 78; K.N. Youngentob, G.E. Likens, J.E. Williams and D.B. Lindenmayer, ‘A Survey of Long-Term Terrestrial Ecology Studies in Australia’, *Austral Ecology* 38, no. 4 (2013): 365–73. A powerful Australian example is Darrell Lewis, *Slower than the Eye Can See: Environmental Change in Northern Australia’s Cattle Lands, a Case Study from the Victoria River District, Northern Territory* (Darwin: Tropical Savannas CRC, 2002).

24 J.T. Callahan, ‘Long-Term Ecological Research’, *BioScience* 34, no. 6 (1984): 363–7.

25 Timothy K. Kratz, Linda A. Deegan, Mark E. Harmon and William K. Lauenroth, ‘Ecological Variability in Space and Time: Insights Gained from the US LTER Program’, *BioScience* 53, no. 1 (2003): 57.

26 In 2004, Charles Redman and others published a paper in the journal *Ecosystems* calling for the integration of social science into the long-term ecological research network. They highlighted the role of social factors in environmental change and the importance of cross-disciplinary participation in painting a complex long-term social-ecological understanding. See Charles L. Redman, J. Morgan Grove and Lauren H. Kuby, ‘Integrating Social Science into the Long-Term Ecological Research (LTER) Network: Social Dimensions of Ecological Change and Ecological Dimensions of Social Change’, *Ecosystems* 7, no. 2 (2004): 161–71. A political ecology gaze prompts acknowledgement that the act of photographing is in itself one embroiled with territory, rights and ownership; what is *missing* from historical ‘databases’ also contributes important knowledge about values and power.

27 Andrew J. Trant, Brian M. Starzomski and Eric Higgs, ‘A Publicly Available Database for Studying Ecological Change in Mountain Ecosystems’, *Frontiers in Ecology and the Environment* 13, no. 4 (2015): 187.

28 Freund and Thomson, ‘Introduction: Oral History and Photography’, 13.

reparations beyond aspiring to recreate fixed historic states.²⁹ The present paper conveys how oral histories, photographs and environmental history can work not to articulate historical truths or ecological baselines alone, but rather, to facilitate critical reflections on the past and inspire future possibilities.

INTRODUCING THE MONARO

This work is situated in an agricultural region with significant grassland and grassy-woodland communities in the Monaro, NSW. The high-country grasslands have a rich cultural history. The Monaro is home to many Aboriginal peoples, primarily the Ngarigo (tablelands) and the Wogul or Wolgalu (high country), but also the Gundawahl, Djillamtong, Berrengobugge, Yaimatong, Croatingalong and Yuin peoples.³⁰ The land's abundance has been cultivated through farming practices highly attuned to place, where starch-rich yam fields awaited harvest, native grasses were milled for flour and succulent chocolate lilies wafted sweet aroma across fields.³¹ Each summer, people ascended to the ridges to feast on the nutrient and protein-rich food source of migratory Bogong moths (*Agrotis infusa*).³² This is a peopled place, both in ancient history and in contemporary practice – a worked, 'productive' landscape. Like much of the continent, although it is now mostly 'freehold title' under settler law, it remains unceded Aboriginal land.

29 For example, a recent critical cultural turn in ecological restoration has been driven both by climate change and the recognition of Indigenous peoples' role in ecological change. See Eric Higgs, Donald A. Falk, Anita Guerrini, Marcus Hall, Jim Harris, Richard J. Hobbs, Stephen T. Jackson, Jeanine M. Rhemtulla and William Throop, 'The Changing Role of History in Restoration Ecology', *Frontiers in Ecology and the Environment* 12, no. 9 (2014): 499–506; Lilian M. Pearce, 'Critical Histories for Ecological Restoration' (PhD Thesis, Australian National University, 2019).

30 Snowy Monaro Regional Council, 'Aboriginal People of Monaro', ACT Government, 2001, 1. Available at <https://www.snowymonaro.nsw.gov.au/DocumentCenter/Home/View/4547>.

31 Nicholas S.G. Williams, Adrian Marshall and John W. Morgan (eds), *Land of Sweeping Plains: Managing and Restoring the Native Grasslands of South-Eastern Australia* (Clayton South: CSIRO Publishing, 2015).

32 The cultural migration driven by moth harvest served a deeper purpose of intercultural meetings, initiation rites, corroborees, trade and friendship. See Josephine M. Flood, *The Moth Hunters: Aboriginal Prehistory of the Australian Alps* (Canberra: Australian Institute of Aboriginal Studies, 1980); Josephine M. Flood, *Moth Hunters of the Australian Capital Territory* (Lewisham, NSW: Clarendon, 1996). For details about the Bogong moth see Eric Warrant, Barrie Frost, Ken Green, Henrik Mouritsen, David Dreyer, Andrea Adden, Kristina Brauburger and Stanley Heinze, 'The Australian Bogong Moth *Agrotis Infusa*: A Long-Distance Nocturnal Navigator', *Frontiers in Behavioural Neuroscience* 10, no. April (2016): 1–17. In recent years the Bogong moth numbers are rapidly declining, threatening contemporary ecological processes and cultural practices. See Jo Khan, 'Decline in Bogong Moth Numbers Could Have Catastrophic Effects in the Australian Alps', *ABC News*, 27 February 2019.

Contemporary ecological and social relationships are impacted by over two hundred years of settler-colonial interventions, some of them violent, in a complex cultural landscape. Stories from this region are woven into the dominant Australian human-environment imaginary. This is the land of pioneering fables of stoic frontier labour, and the bushranger-led Man-from-Snowy-River horseback adventure with cattle dogs and fleece of eighteenth-century oil paintings.³³

In the Monaro, people have been both spoilers and improvers of the land.³⁴ The impacts of agricultural policies and ‘progress’ in the Monaro and other Australian ecosystems are considered elsewhere.³⁵ They include those of invasion, settlement, violence to Indigenous peoples and culture, clearing, and increasingly industrialised agriculture. Mechanisation of labour and farming in Australia has increased rapidly since the 1950s.³⁶ So too have dreams of productivity unbound by biophysical realities as industrial technologies have accelerated land change and furthered ecologically inappropriate imaginaries. Yet on certain properties, there is growing resistance to this type of relationship with the land. One such property is Montreal.

VISITING ‘MONTREAL’

In March 2017, I met with Dunbar Wilkinson and his parents, June and Bob Wilkinson.³⁷ Bob’s great-great-grandfather came from England in 1852 and his great-grandfather

33 This imaginary was widely popularised by Banjo Paterson’s famous poem, later turned into film *The Man from Snowy River*. See Andrew Barton Paterson, *The Man From Snowy River and Other Verses* (Sydney: University of Sydney Library, 1997). Available at <http://adc.library.usyd.edu.au/data-2/v00001.pdf>.

34 Hancock, *Discovering Monaro*. The depiction of British settlers as ‘spoilers’ of land through manipulation of the environment for economic purposes was later made popular by Geoffrey Bolton: Geoffrey Bolton, *Spoils and Spoilers*, 2nd ed. (Sydney: Allen & Unwin, 1992).

35 Hancock, *Discovering Monaro*; John Merritt, *Losing Ground: Grazing in the Snowy Mountains 1944–1969* (Dickson, ACT: Turalla Press, 2007); Tom Connors, ‘Closer Settlement Schemes’, *The Australian Quarterly* 42, no. 1 (1970): 72–85. The impact of these schemes is considered in great detail in Broome et al., *Mallee Country*.

36 Anderson, *Endurance*; Broome et al., *Mallee Country*.

37 Oral sources include the following: Dunbar Wilkinson, June Wilkinson and Bob Wilkinson, interviewed by author, ‘Montreal’ Monaro, NSW, 18 March 2017, tape and transcript held by author; Dunbar Wilkinson, June Wilkinson and Bob Wilkinson, interviewed by author, ‘Montreal’ Monaro, NSW, 20 March 2017, tape and transcript held by author; Dunbar Wilkinson, interviewed by author, ‘Montreal’ Monaro, NSW, 18 March 2017, tape and transcript held by author; Dunbar Wilkinson, interviewed by author, ‘Montreal’ Monaro, NSW, 20 March 2017, tape and transcript held by author.

purchased the original family property that lies just south-west of Cooma, New South Wales. Though still marginal grazing land, it isn't the harshest of the treeless-plains country. The farm is made up of treeless open basalt plains, some lighter shadier country with snowgum (*Eucalyptus pauciflora*) and mixed shrubs, and open rolling granite plains. Since the family took ownership, the land has mostly been managed with a mix of sheep and a small proportion of cattle. Through the 1950s to 1970s, Bob carried out some pasture improvement of introduced species and a small amount of cropping for fodder. Before then, the main alteration to the land came from hard hooves, changing of water-courses, and the cessation of local burning regimes that accompanied European invasion continent-wide. Today, Dunbar and his brother Sinclair each run 3,000 of the original 6,000 acres of land; Dunbar manages 'Montreal'.

I invited the Wilkinson family to participate in my postdoctoral research on histories and cultures of ecological restoration because they had high-quality native grasslands patches and were managing their property in innovative ways that had changed over time in response to place-based lessons.³⁸ They have been involved in some ecological restoration programs and research. Montreal is a multi-generation farm that is able to speak to the experience of changes over time influencing their management practices and relationships with place.

In March 2017 I conducted two interviews with Dunbar, June and Bob around the family dining table. The first, on 18 March, was guided by a loose life history framework. Photo albums and diaries were considered together only after inviting the family history and establishing a convivial research-participant relationship. For the second, on 20 March, photo albums were open from the beginning and held the discussion, which involved a lot of movement as photos were passed around. Each interview ran for approximately one and a half hours, after which, Dunbar and I

38 I had an existing relationship with the Wilkinson family through previous research on native grassland conservation as an ecologist and social researcher. The family's conservation activities were well understood and documented through their involvement in programs such as Greening Australia's 'Whole of Paddock Restoration' initiative. This research formed part of my PhD dissertation. See Pearce, 'Critical Histories for Ecological Restoration'.

headed out for property field visits that ran approximately two hours in length.³⁹ This work was literally grounded in place; we explored properties in boots and utes with working dogs by our sides. We jumped fences, scaled rocks and scanned horizons.

PHOTOGRAPHIC REFLECTIONS

Family photographs were objects that came to life: as a guide for storytelling, and as windows into new interpretations and reflections on the past. Importantly for this research, the content in the background – the soil cover or the extent of the tree line – became a rich archive of environmental history and of stimulus for reflective discussion about changing land-use practices and wider shifts in cultural attitudes. Examples of four photographs produced between 1950 and 1994 (Figures 1 to 4) and the discussions that they triggered are presented herein. I chose to include these four photographs in this paper as they each work to tell a unique relationship that the family has with the past and with the farm over time.⁴⁰

BOB'S FIRST TRACTOR



Figure 1 Bob Wilkinson's first tractor in 1951; one of the first in the Monaro. Photograph courtesy of the Wilkinson family.

39 With permission, discussions were audio recorded using a hand-held recording device and partially transcribed by the author. Photographs were digitally photographed and archived. I took extensive field notes and photographs during visits. Transcribed material was reviewed and thematically coded within a wider project framework and the family were given the opportunity to review all in-press material. For details see Pearce, 'Critical Histories for Ecological Restoration'.

40 While individual pictures held the discussions for a time, they often acted as links to new topics. Content is reported here as was discussed against the individual photograph as best possible.

A black and white image of a tractor on the back of a truck stands out against the rolling hills in the family album (Figure 1). Bob Wilkinson bought his first tractor in 1950. This photograph captures a moment when the machine, the first in the district, was on its way to the 1951 Cooma show for promotion. As Dunbar explained, they were still a ‘novelty’ in the district. At the time this photograph was captured it was a proud moment representing the family’s embrace of industrial progress and farm mechanisation in Australia in the 1950s. It was a natural progression from masculinised narratives from the Monaro of hard-working men from the high country. Today, it is read from a position of understanding the impact that mechanisation went on to have on local ecologies. This photograph triggered reflections about local ploughing history, land-use history on their property, and a trend for expanding technological ‘progress’ in the region.⁴¹

Cultural norms and industrial promises of unchecked growth are powerful. Dunbar laments that still for a majority of the sector, the message is one of bigger investments, bigger money and bigger change; a culture where ‘the next generation always has to do bigger than Dad’ with ‘round-up (Glysophate), bigger tractors, and bigger gear’. He attributed this to a cultural condition:

I just think it was poor Australia, discovered at the industrial time, which was a tragic time, and that’s why its extinction rate is the biggest in the world ... I think whitefellas find it hard to put anything in reverse, or even put it in neutral ... we just couldn’t believe what [our neighbours] were doing when they were so big anyway, you know, did they need to be clearing and spraying out another paddock of native country, and my brother said ... ‘they’re just like a ratchet – stuck on one direction – they only know one way to go and that’s more production, more production, more production ... I just think in our white culture it just runs pretty deep that you can never have too much and always feeling that insecurity.

41 In the post-war period tractor numbers were exploding across the globe, propelling agriculture into a mechanised and industrial era. See Meredith McKittrick, ‘Industrial Agriculture’, in Erin Stewart Mauldin and John Robert McNeill (eds), *A Companion to Global Environmental History* (Chichester, England: Wiley-Blackwell, 2012).

Conversations turned to the resilience of unploughed country and the significance of ploughing for its capacity for regeneration: Histories of ploughed land determine ecological quality and restoration potential. But ‘it’s amazing’, said June, ‘how forgiving and tough native country can be if it hasn’t been poisoned or deeply ploughed’.

Remaining un-ploughed and ‘un-improved’ areas hold critical value for the future of native grasslands. Devices like the stump-jump plough are celebrated as a ‘symbol of Australia’ but remain one of the most significant desecration devices in Australia’s history of soil.⁴² These days, while ecological knowledge of damage inflicted by ploughing is present, it is not necessarily reaching the farmers or affecting practice. Dunbar blames ignorance more than ill-will. He said ‘People don’t sort of get up in the morning and say, “I’m going to stuff the environment today” or “I’m going to give stock a hard time”’. The problem is that this ignorance leads to such drastic and irreversible change. ‘That’s the tragedy of the plough’, lamented June, ‘that any old farmer can just hook on a plough and change that land forever, with no scientific knowledge’. June explained that there has been more destruction of native grasslands in the last five years because of the ability to get to places where the plough wasn’t able to get before. Those remaining unploughed areas in the region are now at risk.

Today, the photograph is related to differently: stimulating a wider critique of the cultures of technological intervention in Australia and how these are linked to colonisation. Today, the photograph marks a foreboding of something bigger, out of control and unchecked, that for a time the family embraced.

⁴² See George Main, *Heartland: The Regeneration of Rural Place* (Sydney: University of New South Wales Press, 2005); George Main, ‘Object in View: A Stump-Jump Plough: Reframing a National Icon’, in Jennifer Newell, Libby Robin and Kirsten Wehner (eds), *Curating the Future: Museums, Communities and Climate Change* (London: Routledge, 2016); Williams, Marshall and Morgan (eds), *Land of Sweeping Plains*.

JUNE ON THE LAKE



Figure 2 June Wilkinson on her horse after rain circa 1994. Photograph courtesy of the Wilkinson family.

‘Oh, that’s what the lakes do in better years, Lilian. From bone dry and nothing ... it takes a lot of rain’. Dunbar removed the faded photograph of June on her horse in the middle of a shallow lake (Figure 2). In contrast to the reflections brought up by the picture of the new tractor, the way that June is on horseback inside the water evokes something so much gentler.

This photograph helped to articulate the change in bird species and populations and weather patterns over time. Migratory birds including Japanese snipe (*Gallinago hardwickii*), sea eagles (*Haliaeetus leucogaster*), and a range of gulls, cranes and other waterbirds have visited the property. June said that in the past ‘if you closed your eyes and listen you’d swear you were somewhere in the Coorong’. ‘When we were kids in the ’70s’, said Dunbar, ‘we used to count 70 black swans up there, but [now]; a couple, but they haven’t come back in a big way’. ‘I used to ride home on my horse in the moonlight and you’d hear those mmm, mmm, mmm little swan sounds, little frog sounds, all doing their thing in the moonlight at night’, says June. We also talked about Omeo Storksbill (*Pelargonium striatellum*), an endangered local native

herb that has withstood grazing and still remains, and the fact that the extent of what has been lost is unknown.

Dunbar asked his parents if the lake was ever ploughed when it was dry. During the interview and through the conversation triggered by revisiting his photograph, he learnt about the history of the property himself. Discussion turned to contemporary management of this area; the cattle love a special grass that grows in it, but Dunbar would like to see them kept off certain sections of wet areas. They talked about the use of a hot wire ‘to keep the cattle out of the nesting bird habitat’.

On my way out of the property, I pulled over to observe the lake. Today it is a dry indentation in the landscape; the boom-and-bust cycles of its ecology are unpredictable and will become ever more so with predicted climate scenarios.

DRYING WILDFLOWERS



Figure 3 June and Bob Wilkinson with a local ecologist monitoring wildflowers, circa 1990. Photograph courtesy of the Wilkinson family.

We were all drawn to a faded image of June and Bob with a local ecologist (Figure 3). The botanical diversity here has been studied and celebrated throughout the years.

The family has developed strong relationships with universities and research scientists to support different species that thrive on their property. As well as a record of what lives on this land at that particular point in time, this and similar photographs

are an artefact of appreciation of nature. This image captures the tenderness with which June lays down a local daisy as the three consider the floral diversity on their property. The image triggered reflections on biodiversity, a love for wildflowers and a caring ethic. She alerted ecologists to the endangered Monaro golden daisy (*Rutidosia leiolepis*) that she came across in a little knoll in a grazed paddock. They fenced this area, which June describes as full of ‘beautiful’ ‘little things’ that ‘smell like heaven’.

June explained that she inherited this culture of loving nature. She remembers her grandmother Emily Mary Barton, Australian poet Banjo Paterson’s first cousin, calling the clearing of native vegetation ‘a massacre of the innocent’. A poem titled *Wildflowers* (dated 1840) appears in a collection of family diary materials collated by June’s cousin. It reads:

Long, long are the hours my love is away

[...]

But I’ve made myself friends of the flowers of the field

There are none here to seek them or love them but me

And for me all their sweetest perfumes they will yield

And display their rich hues for their mistress to see

They peep at me smiling wherever I go

Thro’ the grass and the boughs in the meadow and grove

And the breezes that over the far mountains blow

Bring me all their kind whispers & breathings of love.

Family archives like this help to understand what may have been lost from the system. Ecological histories are present in photographs, in diaries, and in descriptions of the ‘sweetest perfumes’, ‘rich hues’, ‘grass ... boughs ... meadow and grove’. More recently, photography has been enlisted to document spring wildflowers. June unravelled a roll at least two metres long of coloured photographs of different species taken in a ‘good year’ by a professional photographer. These images, and those yet untaken continue to build stories and relationships with species diversity on the farm, forming critical archives of the future.

The depiction of love of local ecology also narrates another side to stories of desperation to ‘improve’ the Australian land. It reveals local species as ‘friends’, mitigating the isolation of people on farms. With few women in the region, women on farms turned to the natural world for kinship (‘I’ve made myself friends of the flowers of the fields’). The beauty that drove the development of a caring land ethic is embedded within.⁴³ This story suggests a significant role of gender in shaping environmental responses and pluralising the region’s dominant environmental history of hard-working men transforming the environment.⁴⁴

43 For examples of literature that explore the role of women in conservation and kinship being found in the natural world see Margaret Somerville, *Wildflowering: The Life and Places of Kathleen McArthur* (St Lucia: University of Queensland Press, 2004); Katie Holmes, Susan K. Martin and Kylie Mirmohamadi, *Green Pens: A Collection of Garden Writing* (Melbourne: The Miegunyah Press, 2004); Ruth Ford, “‘The Wattles Are in Bloom ... Crops Are Looking Wonderfully Well’ Settler Women in the Victorian Mallee, 1920s–30s”, in Alan Mayne and Stephen Atkinson (eds), *Outside Country: Histories of Inland Australia* (Adelaide: Wakefield Press, 2011), 63–94; Karen Twigg, ‘Along Tyrrell Creek: An Environmental History of a Mallee Community’ (PhD thesis, La Trobe University, 2020).

44 A discussion of the importance and complexity of woman and gender as categories in environmental history analysis is provided by N. Unger, ‘Women and Gender: Useful Categories of Analysis in Environmental History’, in A. Isenberg (ed.), *Oxford Handbook of Environmental History* (Oxford University Press, 2014), 600–43. Critical development of the field of gender analysis in environmental history is provided in Katie Holmes and Ruth Morgan (eds), ‘Placing Gender [Special Issue]’, in *Environment and History*, vol. 27, 2021.

BABES IN A PRAM



Figure 4 Baby Sinclair Wilkinson and a friend in pram circa 1967. Photograph courtesy of the Wilkinson family.

June broke out into laughter before I saw the next picture: ‘But look how bare it is! And look at the English pram!’ Two young babes under a year old are bundled up in their pram in the foreground (Figure 4). They are the timekeepers for this moment. The background quickly came into focus and June and Bob reflected on the state of the earth at that time: dry, exposed, hot. In this case, the place between photograph and oral narrative is literally

the ground underneath them. It is not clear how much the intention behind this photograph was to document the children or the state of the environment, which, for farmers, is always both home and livelihood, but the happy foreground does not hide the reality of struggle.⁴⁵

For the Wilkinsons, after years of living with close to bare ground and soil loss, the precipitation of a different approach to management finally came about during the ’81 drought when, June said, ‘the seasons became a lot more unpredictable’. No traditional cropping or pasture improvement has occurred at Montreal since. The family has come to understand that exaggerated drought and soil erosion were local responses to inappropriate land management. June explained:

The problem isn’t drought. It’s living on country that isn’t designed to be carrying set stocking. You know, a certain amount of animals ... if we could just put them on ice while there is no rain and then put them back. There are periods where the country is exposed and the animals are still on it, it’s shockingly destructive.

⁴⁵ See Freund and Thiessen, ‘Mary Brockmeyer’s Wedding Picture’; Freund and Thomson, ‘Introduction: Oral History and Photography’.

Bob's reaction was to periodically send away or sell stock in order to conserve soil. As a result, said June, 'our taxation would say that we'd had a very good year so we would have to pay extra tax'. In this way, the system actively penalised farmers for protecting soil.

The main message elicited from this photograph for June was disappointment in how little things have changed, despite time and trying. She conveyed her dismay at the impact of settler history on the land:

It's the blindness, all that we're talking about, is all what the Aboriginals [sic] knew what not to do and they would have lived for another however many 60,000 years doing what they were doing. I mean it is such an old continent, it wasn't meant to be ploughed and have hard hooved animals and all the rest.

Dunbar described the changes to the country as being 'whiteman-ified'. He said that despite some ideas, 'We just don't know what was here'. In this way, reflections on ecological changes enable an approachable confrontation of Australia's bleak history. Earlier in the day June stated:

I feel utterly ashamed to be quite honest, don't you? About our pioneers, earlier days, Aboriginal and pasture wise, everything. I cannot feel proud; I can't feel proud of being Australian.⁴⁶

⁴⁶ The Australian cultural experience of shame at the violence to Indigenous peoples in the name of colonisation is becoming more articulated. In the last five years there has been a flurry of public conversation and publications about Australia's violent history. For example, Nicholas Clements' popular book on Tasmania's Black War (Nicholas Clements, *The Black War: Fear, Sex and Resistance in Tasmania* (Brisbane: University of Queensland Press, 2014) and, the University of Newcastle's project to collate data and map massacres of Indigenous peoples, which has since been redesigned into a more public interactive map through publication in *The Guardian* (see Lyndall Ryan et al., 'Colonial Frontier Massacres in Central and Eastern Australia 1788–1930: Bibliography', *The Centre for 21st Century Humanities* (Newcastle, 2018), https://c21ch.newcastle.edu.au/colonialmassacres/ColonialMassacres_2_0_Bibliography.pdf; 'The Killing Times', *The Guardian*, 2018, <https://www.theguardian.com/australia-news/ng-interactive/2019/mar/04/massacre-map-australia-the-killing-times-frontier-wars>). The relationships between shame and ecological restoration activities has also been explored in detail by William Jordan, see William R. (III) Jordan, *The Sunflower Forest: Ecological Restoration and the New Communion with Nature* (London: University of California Press, 2003).

Evidence in the land of historical change reminded the family that they are not innocent in their involvement in soil loss, nor immune to it. The Wilkinsons' intensely emotional response to eroded soil and all it represents shifted their behaviour.⁴⁷ Today, soil exposure and erosion are things Dunbar avidly avoids. He runs mostly beef cattle and some Merino sheep in quick rotation, leaving a longer recovery time for the land. His shift from largely grazing sheep to cattle was because he 'couldn't stand seeing what the sheep were doing to the country', and because he 'always felt if you have to pour chemical on something constantly for it to survive ... it was the wrong animal to be running in that environment'.

This photograph made visible the environmental relationships of a particular time and place, as well as those which preceded it. More so, it brought into conversation the enduring impacts of imported settler-colonial farming practices and their consequences that, as a society, Australia is yet to grapple with. Looking through the photographs for change, Dunbar told June that 'most of it is negative' but June comforted 'but it would *all* be gone probably'. 'Yeah, but there are a lot of places where there *were* trees and we haven't fenced and the trees have gone, there's nothing there now', he said.

Writing on extinction, Thom van Dooren considers how the experience of mourning can make us more conscious of our relationships with other species and instil a caring responsibility. He advocates that 'taking it seriously, not rushing to overcome it – might be the more important political and ethical work of our time'.⁴⁸ Photo albums can help to bring people to a place of recognition, which is where such reflection can occur.

⁴⁷ For the powerful role of emotions in living with drought see Rebecca Jones, 'Uncertainty and the Emotional Landscape of Drought', *International Review of Environmental History* 4, no. 2 (2018): 13–26.

⁴⁸ van Dooren, *Flight Ways*, 4.

BRINGING PHOTOS INTO THE PRESENT

Dunbar and I returned to sites of past photos, significant restoration activities and areas of rich ecological diversity on the farm (Figures 5, 6 and 7).⁴⁹ The method of bringing the past and present into conversation through the aid of photographs was designed prior to field work but took direction from the archive in question and interest and capacity of the family. The photo points were selected by the family, with Dunbar directing the ultimate decisions as he was the tour guide. I was conscious to step back as these discussions took place.

While making our way across paddocks and through farm gates to historic photo points we spoke about what has been, what is, and what might become. Mnemonics were everywhere; stories erupted as we encountered different triggers, the continuing past and present alive in the land and transcending limits of time and space. We drove to the top edge of the property, seeking the spot where a particular photo was taken over 20 years ago. We parked the ute in the shade of an old gnarled gum and walked about 20 metres to the precise location – likely the same path Dunbar took when he took the original photograph. ‘The whole reason I took that was a bit more of a novelty seeing ’roos back then, and there they are in the sun’, he said, pointing to the tiny specks in the faded picture.⁵⁰ Looking over the landscape he compared it with the old photograph to consider change (Figure 5). As Joan Schwartz writes, ‘the meaning of photographs, like the meaning of the landscapes they record, change from viewer to viewer, and across time and space’.⁵¹

The neighbour whose property is in the image (Figure 5) has always stocked in a very conservative way, and the condition of his land is something that Dunbar uses to check his own. He pointed to individual trees and the slope of the hill, connecting the missing life and the new ones in the jigsaw pieces of the image. At other points discussions turned to what was, is, and might be: threads of family farming history

49 The number of sites visited was limited by time, but this was a practice that Dunbar continued over the following weeks.

50 Today an overpopulation of kangaroos is challenging for farmers in the region.

51 Schwartz, ‘On Photographic Reflections: Nature, Landscape, and Environment’, 773.

intertwined with the politics of agricultural policies; shame at lost Indigenous knowledge, and specific stories of family land-use history that can still be read and felt in the landscape today.



Figure 5. Dunbar Wilkinson comparing then and now, 2017. Photograph by Lilian M. Pearce.



Figure 6. Revisiting the edge of a fenced regeneration plot at Montreal, 2017. Photograph by Lilian M. Pearce.

We crossed over a clear land-use history boundary between ploughed and unploughed land as we headed higher up the hill. We got in and out of the ute, moving at a pace attuned to gestures and storytelling; a shotgun tucked at the bottom of the windscreen. We compared the past and present of the ploughed and unploughed paddocks (Figure 7). Here, on our knees, we observed the intricacies of the species that make up this unploughed grassland. The colour palette increased, and the ground felt different underfoot: a diverse desiccated soil crust awaiting the next rain. Dunbar explained: ‘Wherever it’s like this you never get a heap of those invasives. Wherever it’s been able to keep its integrity it’s always so

much more resilient to the outsiders'. Looking over the paddocks Dunbar pointed out areas that have not been ploughed or chemically altered, which he said, 'still have a bit of the old spirit left in them'.



Figure 7. Comparing the past and present of a ploughed and unploughed paddock at Montreal, 2017. Photograph by Lilian M. Pearce.

Squat down, face to the earth; it smelt different here, tired and worn, holding on to an ancient wisdom of tiny petals and lichen crust. We crouched down to inspect various rock ferns and gruggly bush (*Melicytus dentatus*) that thrive in the cracks in the granite and I tasted the tart purple berry. Grasslands persist here as resilient vegetation with tenacious roots, symbolic of local character amongst agricultural landscapes and challenging ecological conditions. Their endurance provides hope. It is this essence of spirit – in the feeling of a flourishing sacred system – that drives much of their behaviour change and restoration efforts, and that keeps me drawn to research such as this.

Dunbar worries that predicted climate extremes will tip this marginal country over the edge, and he is right to worry. Extreme weather, ecological decline and market pressures all have the potential to wreak havoc on farms.⁵² He said that shade might

⁵² For a thorough study of pressures to rural farming communities in Australia see: Neil Barr, *The House on the Hill: The Transformation of Australia's Farming Communities* (Canberra, ACT: Land & Water Australia, 2009). The IPCC Fourth Assessment Report concludes that Australian agriculture and the natural-resource

be ‘the difference between being viable and not’ so is focusing on getting larger trees into the landscape for ecological function. Deeply sensitive knowledge of the property has allowed him to develop his own strategies for successful tree planting in the boulders, where there is increased thermal mass, moisture, shelter and rainfall. The photographs that I took with Dunbar in the field included trees that he planted that are now mature and thriving; of the edges of fenced regeneration plots that demonstrate how well the land can recover if rested. They are images taken from the perspective of a different time, with different measures of ‘success’.

As the afternoon light hit the pale trunk of gums Dunbar reflected on his childhood and what he loves about living here; something that, for all its challenges, continually pulls him back and holds him and his family on the property. ‘I don’t feel complacent about it ... there is not one part of the day when it’s not constantly changing. I love it’.

The affection for place and deep connection to this land is paramount, supporting Jones’ claim that:

Acknowledging the role of sentiment in managing the land is not anachronistic romanticism but part of a mature acceptance that sustainably producing food in our biophysical environment requires caring strongly for the land and its future.⁵³

Taking oral histories and photographs into the field invites the agency of the natural world into conversation. As Katie Holmes writes:

A core tenet of environmental history is the agency of the ‘natural’ world: it is not just something on which humans have acted – often in highly

base on which it depends has significant vulnerability to the changes in temperature and rainfall projected over the next decades to 100 years. See Chris Stokes and Mark Howden (eds), *Adapting Agriculture to Climate Change: Preparing Australian Agriculture, Forestry and Fisheries for the Future* (Collingwood: CSIRO Publishing, 2010).

⁵³ Jones, *Slow Catastrophes*, 330.

destructive ways – it has its own agency, its own cycles, and is as capable of shaping humans and human behaviour as vice versa.⁵⁴

In *The Land Speaks: New Voices at the Intersection of Oral and Environmental History*, the opportunity for the participation of the non-human world in oral history work is presented.⁵⁵ This edited collection follows a more-than-human trend in geography and the environmental humanities to break down the human/nature divide.⁵⁶ Indeed, ‘in the present context of ecological destruction’, argues Val Plumwood, ‘we desperately need ways to increase our sensitivity to and communicativity with others of the earth’.⁵⁷ This task is critical for reframing futures.

CONCLUSION

Family archives and oral histories bring the past vividly into conversation with the present; history is reinterpreted and reimagined through encounters in the land. Grazing in the Monaro is a practice that asks one to confront both ecological realities and colonial legacies. As illustrated through this research, processes of recognition, reflection and redress underpin local knowledge and changes in practices. For the Wilkinson family, the disjuncture between farming expectations and physical land capacities grows clearer by the day. Their aggregated knowledge draws on experience, story and memory that together influence their management decisions and daily experiences, motivating activities more in accordance with local limitations and

54 Holmes, Gaynor and Morgan, ‘Doing Environmental History in Urgent Times’, 230.

55 Lee and Newfont, *The Land Speaks*, 4.

56 Key examples of this work include the following: Sarah Whatmore, *Hybrid Geographies: Natures, Cultures, Spaces* (London: Sage, 2002); Deborah Bird Rose, ‘Val Plumwood’s Philosophical Animism: Attentive Interactions in the Sentient World’, *Environmental Humanities* 3, no. 1 (2007, 2013): 93–109; Sandie Suchet-Pearson, Sarah Wright, Kate Lloyd and Laklak Burarrwanga, ‘Caring as Country: Towards an Ontology of Co-Becoming in Natural Resource Management’, *Asia Pacific Viewpoint* 54, no. 2 (2013): 185–97. Such work often centres Anglo-European perspectives and is not innovative for many Indigenous peoples. It is important to acknowledge the need for post-humanist geographies to be decolonised. See Val Plumwood, ‘Decolonising Relationships with Nature’, *PAN: Philosophy Activism Nature*, no. 2 (2002): 7–30; Juanita Sundberg, ‘Decolonizing Posthumanist Geographies’, *Cultural Geographies* 21, no. 1 (2014): 33–47; Sarah Wright, Kate Lloyd, Sandie Suchet-Pearson, Laklak Burarrwanga, Matalena Tofa and Bawaka Country, ‘Telling Stories in, through and with Country: Engaging with Indigenous and More-than-Human Methodologies at Bawaka, NE Australia’, *Journal of Cultural Geography* 29, no. 1 (2012): 39–60.

57 Val Plumwood, *Environmental Culture: The Ecological Crisis of Reason* (New York: Routledge, 2002), 61.

opportunities.⁵⁸ In the contemporary scenario, learning is taking place within a context of unprecedented change, making the role of history complicated, and more urgent than ever.⁵⁹

This work conveys a way to invite photographs into oral and environmental history that approaches them as wayfinding tools through which interviewees can reflect, critique and think with new understandings of the past. Using a combination of photographs, interviews and field work enabled the land itself, as well as the practical place-based histories and the wider historical, social and cultural context to be foregrounded. Four strengths of this approach came to light that illustrate the capacity for its contribution to environmental change research and adaptation.

First, the opportunity to reflect and revisit photographs, stories and places wove together past and present. This temporal recoupling of past activities and ecological decline, and current opportunities with future possibilities, is critical in a time when, as Holmes writes, ‘we are confronting the environmental impact of past actions at the same time as projecting forward to the future the impact of present actions’.⁶⁰ It became clear that making space for history was meaningful for the family; in follow-up communication they shared that they continued to revisit historic photo points to think about change and compare past and present.

Second, the use of photographs and revisiting photo points held space for intense emotions and reflections. This concurs with writing that posits that the use of photographs in interviews alleviates feelings of interrogation, creates a shared point of reference between interviewer and interviewee, and allows interviewees to

58 This work supports findings of a study by Australian geographers Nicole Graham and Robyn Bartel of innovative private landholders. Graham and Bartel suggest that ‘narratives of landholders who have worked to align their land use practices with the land itself offer important lessons for the future of treating biodiversity conservation not only as the province of public property management’: Nicole Graham and Robyn Bartel, ‘Farmscapes: Property, Ecological Restoration and the Reconciliation of Human and Nature in Australian Agriculture’, *Griffith Law Review* 26, no. 2 (2017): 242.

59 For more on this see Holmes, Gaynor and Morgan, ‘Doing Environmental History in Urgent Times.’

60 Holmes, Gaynor and Morgan, 233.

guide enquiry and discussion.⁶¹ The current practice seemed to externalise personal responsibility and shame often involved in both oral histories and environmental management work, while bringing connection and sense of place to the foreground.⁶² Through this technique, discussions of changing management decisions and farming practices, and of ecological restoration successes and failures, were narrated and understood within a wider historical-cultural context. The photographs invited wider contemplations about uncomfortable aspects of the settler-colonial violence to people and place and inappropriate farming methods. Such frank discussions expanded conversations about what was in need of care and restoration beyond individual species and ecosystems. Family photographs may play an important role in allowing often difficult conversations about environmental degradation, climate change and wider impacts of settler-colonial histories to be discussed in a safe and convivial way.

Third, this study demonstrates the capacity for oral history and photography to contribute to place-based knowledge elicitation and transfer. Multi-generational knowledge and memories are critical to informing place-based environmental management, yet local knowledge and memories in farming communities are poorly documented and are at risk of being lost. There is a need for the celebration, and possible transfer of local knowledge.⁶³ Oral histories may become more crucial to processes of property succession, especially where succession is outside the family

61 John Collier and Malcolm Collier, *Visual Anthropology: Photography as a Research Method* (Albuquerque: University of New Mexico, 1986); Mannik, 'Remembering, Forgetting, and Feeling with Photographs'; Freund and Thiessen, 'Mary Brockmeyer's Wedding Picture'. As well as the significance of this for emotion, photographs prompted content that I could not have predicted or enquired about.

62 For valuable discussion about the centrality of emotions, and particularly shame, in oral history, see: Alistair Thomson, 'Indexing and Interpreting Emotion: Joy and Shame in Oral History', *Oral History Australia Journal*, no. 41 (2019): 1–11. For writing on the significance of shame in ecological restoration, see: Jordan, *The Sunflower Forest*; Lilian M. Pearce and Ella Furness, 'Restoring for an Uncertain Future: Cultivating Reciprocal Relationships in the Face of Global Change', *SER News* 30, no. 4 (2016): 10–13.

63 Lilian M. Pearce and Josh Dorrough, 'Understanding the Place of Native Grasslands on Productive Land in NSW: Results from Social Research with Private Landholders' (Draft report, South East Local Land Services, NSW, 2016). Relevant considerations of documentation and transfer of traditional ecological knowledge is beyond the scope of this paper, but on this important work see Erik Gómez-Baggethun and Victoria Reyes-García, 'Reinterpreting Change in Traditional Ecological Knowledge', *Human Ecology* 41, no. 4 (2013): 643–7; Leanne R. Simpson, 'Anticolonial Strategies for the Recovery and Maintenance of Indigenous Knowledge', *American Indian Quarterly: Special Issue: The Recovery of Indigenous Knowledge* 28, no. 3/4 (2004): 373–84.

unit. Photographs have the capacity to convey more than detailed management notes, acting as way finders into place-based memories; as June says, ‘helpful from one generation to the next’.

Fourth and finally, photography and oral history can contribute to the ongoing documentation of changing ecologies and changing relationships with place. This work suggests that taking and revisiting photographs helps to reconceive the past, present and future. Private land managers have the potential to be enlisted in long-term repeat photography on their properties that, as with the growing body of citizen science projects, can assist in ecological noticing in a committed place-based practice. Funding is a key reason for long-term ecological studies to fail, but private landholders who are on the land daily and documenting practice may be enrolled for this kind of place-based attention.⁶⁴ It would be a different kind of photography, one that perhaps takes more direct aim at ecological condition, but as evident in the family album, this is never something that can be clearly separated from family decisions and farming activities. A future long-term oral and environmental history study that includes long-term ecological research would reveal the strengths (in environmental, cultural and management spheres) of combining these approaches.

Histories and futures grow from the ground up, in relationship with local places. Private land and private land managers are essential to ecological futures. Personal histories help to challenge ecologically inappropriate ideas about the productive capacity of marginal landscapes. Revisiting of family photographs both in and out of situ has great potential in accessing these histories and cultivating new ways of understanding the past and present. This work demonstrates a way to enlist photographs in oral history work as windows to personal environmental histories of place, and as wayfinding tools in the field to reflect, critique and reimagine past, present and future relationships with the land.

⁶⁴ Youngentob et al., ‘A Survey of Long-Term Terrestrial Ecology Studies in Australia’.

ACKNOWLEDGEMENTS

Excerpts of this research came from my PhD thesis ‘Critical Histories for Ecological Restoration’ (Australian National University, 2019). My thanks to the Wilkinson family, my doctoral supervisors Prof. Libby Robin, Prof. Ruth Beilin and Dr Cameron Muir, and to Dr Karen Twigg, two anonymous reviewers and journal editors for comments on a draft of this paper. This research was funded by a Christine Fifield Bursary (Capital Region Landkeepers’ Trust), a Robert Lesslie Scholarship (Australian National University) and an Australian Postgraduate Award. Research was overseen by Melbourne University Human Ethics project #1545274.1