

People-Nature Relations in the ACT: A report on the present and future of monitoring and management.

Rachael Gross, Jasper Montana, Vanessa Barratt, Jason Cummings, Kate Jennings, Martin Lind, Ro McFarlane, Jazmyn Michie, Amelia Sutherland Saines, Lisa Testoni, Bethaney Turner and Jess Ward-Jones

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University



Acknowledgement of Dhawura Ngunnawal

Dhawura nguna ngurumbangu gunangu Ngunnawal

Nginggada dindi dhawura Ngunnawalbun yindjumaralidjinyin

Mura bidji mulanggaridjindula

Naraganawaliyiri yarabindjula

This Country is Ngunnawal ancestral, spiritual homeland

We will always respect elders, male and female, as well as Ngunnawal Country itself

They always keep the pathways of their ancestors alive

They walk together as one.

It is a privilege to acknowledge and celebrate the Ngunnawal/ Ngunawal people as the ongoing custodians of Ngunnawal Country, in the lands, the skies and the waters. We pay our respects to Country, to Elders, knowledge holders, custodians and all generations of Indigenous peoples who have nurtured their Country for time immemorial.

No matter where we stand in the bush capital, be it a top a Belconnen high rise or swimming in the depths of the Murrumbidgee, we are always on Ngunnawal Country. In this workshop, we aimed to bring together people invested in conserving the environment of the ACT and there is no connection longer, stronger or more relational than that of Ngunnawal people with Country. There would be no environment to care about without preceding millennia of cultural management of land, skies and waters. Further, there is no better example of relations between people and nature than those within Indigenous communities, where Country is people and people are Country. In this report we respect Ngunnawal culture and traditions, actively move towards an Indigenous-informed management plan and create and maintain trust and relational accountability with Country and people.

Executive summary

People–nature relations (hereafter PNRs) describe the diverse ways individuals and communities imagine, value and interact with the rest of the natural world. In the Australian Capital Territory (ACT), these relationships are shaped by the specifics of place: Canberra, the ‘Bush Capital’, reflects a unique blend of urban design and living, deep cultural connections to Ngunnawal Country stretch back thousands of years, and a diverse set of geological and ecological features have evolved over millions of years. The ACT is an exceptional setting for exploring and strengthening PNRs, with over half of the Territory’s land designated as reserves and national parks, and nature integrated into the city’s fabric and imagination.

This report reflects on the present and future of monitoring and management to enhance PNRs in the ACT. It highlights the importance of understanding PNRs not only for biodiversity and climate resilience but also for community wellbeing and inclusive governance. There is great potential to extend understandings of how people engage with nature in the ACT –through recreation, cultural practices, volunteering, and everyday experiences –and therefore a need for more attention to administrative and research data about PNRs and its use to inform planning instruments, such as the ACT Urban Design Guide, further iterations of the Territory Plan and the ACT Wellbeing Framework.

The report draws on workshop insights, existing data sources, and visioning exercises to identify opportunities for advancing PNRs in the ACT. Key outcomes include:

- A reflection on three distinct contexts where PNRs play out for the ACT, including: urban and suburban landscapes; rural and regional landscapes; and protected area landscapes. This recognises that PNRs will not only be shaped by people’s ideas and values about nature, but also the contexts in which they encounter other living things.
- A discussion of some current governance and engagement practices for PNRs and opportunities where stronger collaboration across government, community, research, and Indigenous custodians could be pursued in future.
- An exploration of the prioritisation of monitoring efforts and opportunities for more integrated data collection, sharing and use, as well as participatory approaches to data across sectors of the ACT.

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Editors' Statement

As Canberra faces pressures from urban growth, climate change, and biodiversity loss, the ACT has a unique opportunity to lead nationally — and globally — in developing strategies that centre people–nature relations. By aligning ecological goals with social and cultural values, the Territory can set a benchmark for inclusive, adaptive, and future-focused environmental planning. With over half its land protected, a strong tradition of urban greening, and deep cultural connections to Ngunnawal Country, the ACT offers an exceptional setting for innovation in inclusive environmental governance.

By investing in collaborative approaches, integrated data systems, and culturally grounded strategies, the Territory can set a benchmark for how cities and regions embed ecological and social wellbeing into planning. This leadership would not only strengthen local resilience but also provide a model for other jurisdictions seeking to align biodiversity, climate adaptation, and community wellbeing.

Rachael Gross and Jasper Montana

Centre for the Public Awareness of Science

Australian National University

Who this report is for

This report is for individuals and organisations who are seeking to better understand and apply the concept of people–nature relations (PNRs) in their work. It is particularly relevant for government agencies, planners, and policy makers aiming to incorporate social and cultural values into environmental management and decision-making. Non-government organisations (NGOs) and community groups may also find the report useful in strengthening their case for funding and support, especially when grant applications require evidence of community engagement or wellbeing outcomes. Educators, researchers, and local advocates interested in fostering inclusive, place-based approaches to conservation and land stewardship may also benefit from the insights and examples provided.

Author Affiliations

Rachael Gross¹, Jasper Montana², Vanessa Barratt³, Jason Cummings⁴, Joe Duggan⁵, Kate Jennings⁶, Martin Lind⁷, Ro McFarlane⁸, Jazmyn Michie⁹, Millie Sutherland-Saines¹⁰, Lisa Testoni¹¹, Bethaney Turner¹² and Jess Ward-Jones¹³

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- 1 Centre for the Public Awareness of Science, Australian National University
 - 2 Centre for the Public Awareness of Science, Australian National University
 - 3 Centre for the Public Awareness of Science, Australian National University
 - 4 Ginninderry Conservation Trust
 - 5 ACT Natural Resource Management, ACT Government
 - 6 Southern ACT Catchment Group
 - 7 Healthy Environments and Lives Global Research Centre, University of Canberra
 - 8 Fenner School of Environment and Society, Australian National University
 - 9 Landcare ACT
 - 10 ACT Parks and Conservation Service
 - 11 Faculty of Arts and Design, University of Canberra
 - 12 The Centre for Biodiversity Analysis

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The Australian Capital Territory

The Australian Capital Territory (ACT) is a region in southeastern Australia (covering approximately 2,358 km²) and home to the nation's capital city, Canberra. Known as Australia's 'Bush Capital', the ACT is distinguished by its integration of urban development with expansive natural landscapes. Around 23% of the ACT is urban and suburban, comprising residential areas, commercial centres, and community infrastructure; approximately 55% is protected as national parks and nature reserves, including iconic sites such as Namadgi National Park and Tidbinbilla Nature Reserve; and the remaining 22% is classified as rural and regional land (see Figures 1 for the extent, landmarks and land use of the ACT).

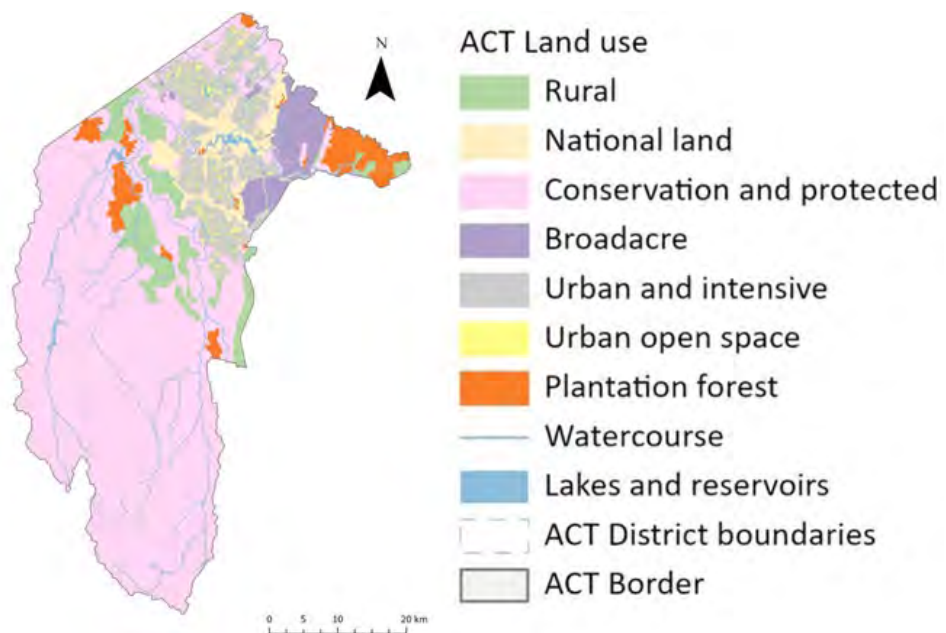


Figure 1: Land use in the Australian Capital Territory. Esri, 2025.

The ACT and Kamberra (Canberra) is Ngunnawal Country. Ngunnawal peoples have lived in and cared for this region for upwards of 20,000 years, maintaining deep and diverse connections to Country across Kamberra. Many iconic places, such as Galambary (Black Mountain) and Jedbinbilla (Tidbinbilla Nature Reserve), are recognised as gathering places, ceremonial sites, and cultural landscapes that reflect the enduring custodianship of Ngunnawal peoples. The Indigenous histories of the ACT lives within many families and people's across the state.

The ACT is today home to a modern city, coupled with agricultural zones, peri-urban areas, and smaller settlements beyond the urban fringe. This spatial arrangement supports high levels of community interaction with nature and enables many approaches to environmental planning, conservation, and wellbeing. Urban development in the ACT is shaped by Garden City principles, which prioritise green space, accessibility, and ecological integration. These foundations have fostered strategies such as urban greening, participatory design, and public spatial data mapping, all of which contribute to dynamic people-nature relations.

People-Nature Relations in the ACT

There are myriad ways in which people relate with nature in the ACT. Far too many to be captured in a single report. However, our conversations suggest that there may be value in thinking about the contexts in which people are most likely to related to nature in the everyday. Here, we reflect on three common contexts where PNRs play out in the ACT, each representing distinct ecological, social, and management dynamics. These contexts include:

- urban and suburban landscapes;
- rural and regional landscapes; and
- protected area landscapes.

1. Urban and suburban landscapes



Photo by Daniel Morton on Unsplash

Urban and suburban landscapes encompass Canberra's residential zones, green spaces, and community infrastructure. They are shaped by everyday interactions with nature through recreation, social connection, and wellbeing. Urban and suburban areas offer opportunities for inclusive planning that supports health, cultural expression, and local stewardship.

Urban and suburban areas in the ACT host a rich variety of people–nature relations shaped by daily life and community activities. For example, gardeners engage with nature through planting, pruning, and composting in gardens, visitors enjoy the floral displays at the annual Floriade festival, cyclists ride around Lake Burley Griffin, and Nggunawal/Ngunawal peoples bring and share their culture in shared spaces. These interactions demonstrate how urban landscapes can support health, cultural expression, and stewardship through inclusive planning and design.

2. Rural and Regional Landscapes

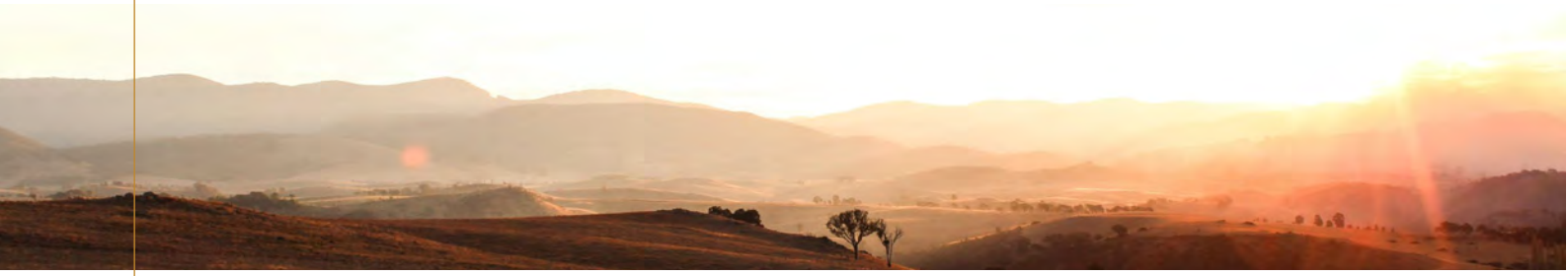


Photo by Hugo Kneebone on Unsplash

Stretching beyond the urban fringe, these regions include agricultural lands, smaller suburbs and peri-urban zones. They are shaped by land use pressures, economic transitions, and the need for integrated regional planning that supports both productivity and environmental stewardship.

Rural and regional landscapes in the ACT feature diverse people–nature relations that reflect livelihoods, culture, and recreation. For instance, farmers engage with nature by tending to crops and maintaining soil health, vintners plant and maintain different vines to sell and have open cellars, Ngunnawal/Ngunawal peoples connect through cultural relationships with Country and sacred sites, and tourists experience nature by visiting farms and participating in agri-tourism. These interactions illustrate how rural landscapes support both economic activity and cultural continuity while fostering opportunities for stewardship and sustainable practices.

3. Protected Areas (non-urban)

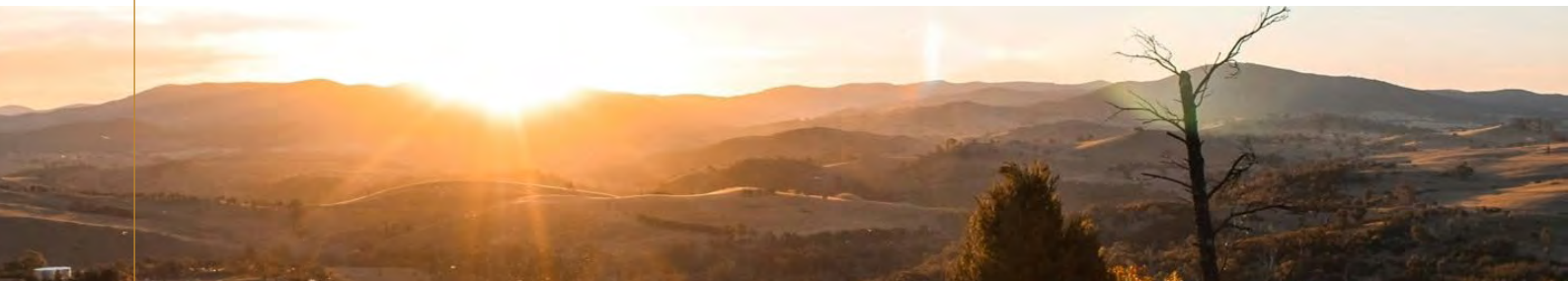


Photo by Hugo Kneebone on Unsplash

Comprising of national parks, nature reserves, and conservation zones, these landscapes are vital for biodiversity, cultural heritage, and ecosystem services. They face challenges related to climate change, visitor management, and balancing conservation with community engagement.

Protected areas in the ACT foster diverse people–nature relations that reflect cultural, recreational, and conservation values. For instance, Ngunnawal and Ngarigo peoples maintain deep cultural connections by caring for Country, recreational users engage with nature through bushwalking and climbing in parks, rivers, and lakes, park staff work to manage the spread of invasive species, and researchers contribute to biodiversity monitoring by collecting data in these landscapes.

These interactions highlight the importance of protected areas as spaces for cultural continuity, scientific knowledge, and nature-based recreation.

Future challenges and opportunities

Over the next 25 years there are a range of environmental and systemic pressures that will impact on people–nature relations across the ACT, including threats such as climate change (including heat and water stress), urban development/habitat loss, wildlife disease and possible zoonoses (e.g. inward migration, starvation, poisoning, heat stress—as well as current, long standing issues like scabies in wombats, Psittacine Beak and Feather Disease in cockatoos and parrots), bushfires, invasive species (e.g. red fire ants, weeds, foxes), chemical use and pressure from adapted and refuge seeking wildlife.

In urban and suburban areas, further pressures are likely to arise from growth in visitor numbers to green- and blue-spaces, habitat fragmentation, and urban-rural separation, especially as population growth and development intensify. In rural and regional landscapes, climate and associated economic pressures, shifting land use, and the limited incentive and funding for regenerative practices will also have an impact. For protected areas, there are likely to be strains from offsetting policies and insufficient support for Indigenous land management, and there will be a growing need for more adaptive conservation strategies.

Despite these pressures, there is great potential for people and nature to flourish across all landscapes. In urban and suburban areas, cities could become refuges for wildlife, with nature connected suburbs, green infrastructure, and biodiversity integrated into planning. This is increasingly a consideration as climate change impacts in surrounding areas become more critical. Actions such as supporting urban agriculture and nature volunteering, youth environmental education, and excursion opportunities could foster ecological literacy and community stewardship. In rural and regional landscapes, there is scope to expand and support regenerative agriculture, local food systems, and climate-responsive planning. There is a continuing role for farmers markets, agricultural schools, tourism operators, and community groups in driving change, alongside strategic mapping and cross jurisdictional collaboration. Protected areas could become even more accessible, amplifying Indigenous voices and language, and enhancing species composition and water quality. These landscapes are likely to be central to cultural and ecological renewal, with opportunities for co-management, cultural interpretation, and deeper public engagement.

Across the board, there is a need for stronger emphasis on education, cultural inclusion, and ecological literacy, with schools, universities, and community groups being key drivers of change across life stages.

Photo by Daniel Morton on Unsplash



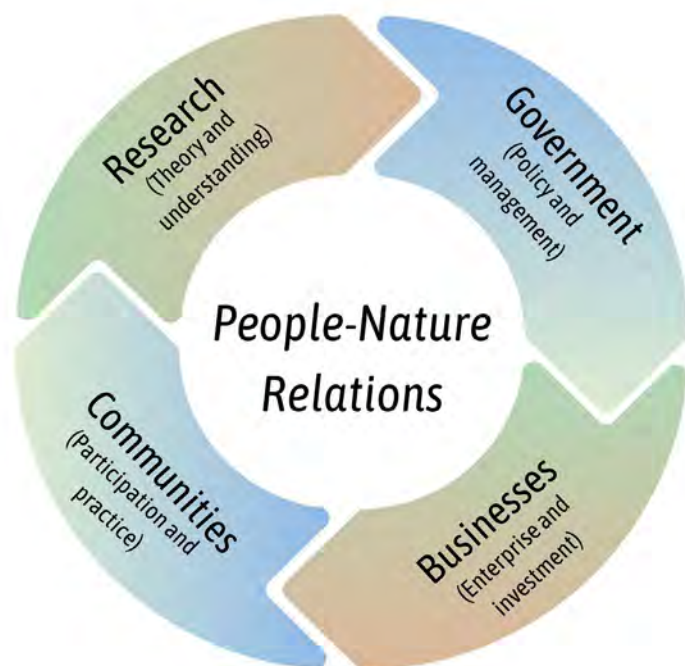
Management approaches for people-nature relations in the ACT

People-nature relations are embedded in and shaped by many aspects of policy, planning, and community engagement. Recognising and strengthening these connections requires not only richer data but also thoughtful approaches to how PNRs are influenced across different landscapes and sectors. This section explores current and emerging strategies for management that is supportive of strengthened people-nature relations in the ACT, highlighting opportunities for more inclusive, adaptive, and culturally grounded practices.

The ACT is home to a diverse range of individuals and organisations that shape how people relate to nature. These actors can be broadly grouped into four sectors: government, communities, and researchers, which each play a distinct role in influencing how nature is understood, valued, and cared for.

- The government sector is responsible for setting policies, managing land and resources, coordinating with developers, and delivering environmental programs. Agencies such as the ACT Parks and Conservation Service help shape the conditions under which people interact with nature through planning, infrastructure, and regulation.
- The community sector includes local residents, volunteers, Indigenous groups, and non-government organisations who engage with nature through everyday practices such as gardening, bushcare, cultural activities, recreation, and advocacy. These interactions reflect lived experience and local knowledge.
- The research sector contributes by developing theories, frameworks, and evidence that help explain the many ways people connect with nature and the impact of this. Universities and research institutions play a key role in generating insights that can inform planning and policy.
- The business and private sectors contribute opportunities for people to relate with nature through the development of enterprise and investment.

Together, these sectors form the foundation for understanding people-nature relations in the ACT and provide a starting point for exploring how these relationships can be supported and strengthened over time.



Categories of actors that shape and enact people-nature relations in the ACT

Supporting and strengthening positive people–nature relations in the ACT involves a combination of established practices and emerging strategies that reflect the Territory’s social, ecological, and cultural context. Diverse initiatives –from maintaining green spaces and supporting volunteering to cultural training and citizen science –offer opportunities to embed people–nature relations in the ACT’s environmental future. Strengthening connections requires not only sustaining existing practices but also embracing innovative, inclusive, and culturally grounded approaches. Some initiatives are set out below that integrate nature into everyday life across urban, regional, and protected landscapes.

Kinds of initiative	Actors involved	Examples
Creating and maintaining high quality green and natural spaces for public use	Government; Businesses; Community	Canberra Nature Park; Lake Burley Griffin; Haig Park; A “Clean Up Canberra Day” style event; regular incentivised working bees
Creating and maintaining green infrastructure on streets, drains and buildings	Government; Businesses; Community	Street trees; green walls; rain gardens; artificial wetlands
Supporting and maximising accessibility to nature volunteering	Government; Community	Landcare; Parkcare, Catchment Groups
Running and supporting nature-related and located public events and amenities for diverse audiences	Government; Businesses; Community; Research	Floriade; mountain biking events; NaturePlay; Heritage Festival Events; Tidbinbilla Open Day; Low sensory tours at Mulligans flat; a map of wheelchair friendly nature spaces; accessibility videos on ParksACT
Capacity building in pro-environmental behaviours	Government; Businesses; Community; Research	SEEChange training, Canberra Environment Centre
Providing community gardens	Government; Community	Weston Creek Orchard managed by Southern ACT CG, COGS, City Farm, Schools, aged care, community support organisations
Ecological literacy training	Government; Businesses; Community; Research	Workshops “What is a grassy woodland” by Landcare ACT, Jerrabomberra Wetlands, Mulligans Flat, Waterwatch Birragai School Camps; ParkCare volunteer training
Ngunnawal cultural training for the wider community	Ngunnawal-led (supported by Government; Businesses; Community; Research)	Funded free public Ngunnawal culture workshops with TOAC
Nature-based social and wellbeing prescribing	Government; Businesses; Community	Landcare ACT Wellbeing programs, therapeutic gardens, forest therapy
Canberra specific citizen science campaigns	Government; Businesses; Community; Research	CSIRO; “Canberra Big Birds/Bugs Day Out”; Bioblitz; Waterwatch; Frogwatch
Cross-sector knowledge exchanges	Government; Businesses; Community; Research	A learning lab with regular forums on PNRs in ACT

Future Opportunity: Enhance collaborative governance and knowledge exchange

Efforts to strengthen people–nature relations (PNRs) in the ACT are often constrained by limited funding, siloed responsibilities, and uneven technical capacity across sectors. These challenges can hinder the development of coordinated, long-term strategies. However, there is promising potential to overcome these barriers through more deliberate and structured collaboration between government agencies, community organisations, researchers, landowners, and Traditional Custodians.

Collaborative governance involves more than just cooperation. It requires shared decision-making, mutual accountability, and the co-production of knowledge and solutions. In the ACT, this could take the form of cross-sector working groups, joint data-sharing agreements, or co-designed planning processes that embed diverse perspectives from the outset. Strengthening these relationships can help align goals, reduce duplication of effort, and scale successful practices across jurisdictions and land tenures. Knowledge exchange is a critical enabler of this process.

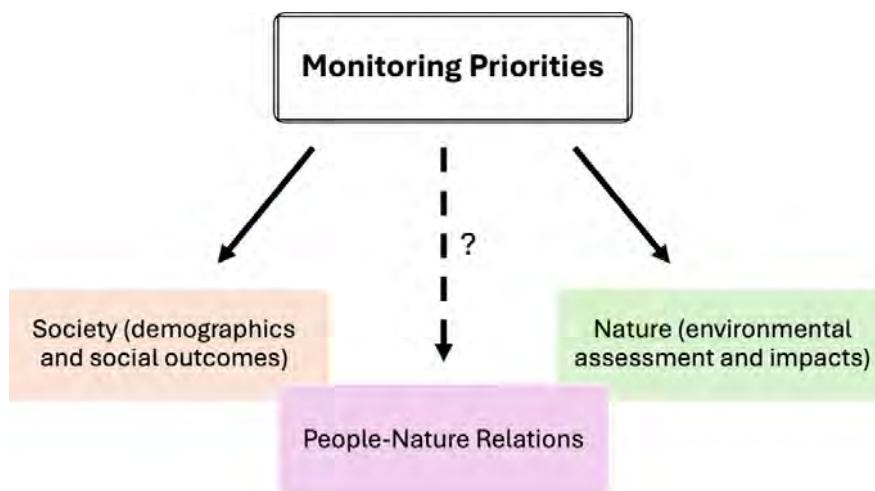
While many organisations hold valuable insights whether through formal research, lived experience, or on-ground practice these are not always accessible or integrated into broader planning frameworks. Creating platforms for regular dialogue, shared learning, and open data can help bridge these gaps. This also includes recognising and resourcing Indigenous knowledge systems, which offer long-standing relational approaches to land and water stewardship.

Photo by Daniel Morton on Unsplash



Data collection, sharing and use on people-nature relations in the ACT

Data has become an integral part of how governments and other governance actors understand the world that they are expected to help govern. However, resources limitations and the reductive nature of data, mean that comprehensive knowledge is both impractical and impossible. Choices need to be made about what to monitor, including how best to collect, share and use that data. It is clear that the collection of data about society has long been a priority of governments. Large-scale censuses inform governments about demographic changes and data about social outcomes, from sectors such as education and health, help shape policy agendas and strategic investments. Likewise, governments have increasingly contributed to monitoring biophysical changes, such as tree-canopy cover or species abundance, through environmental assessment and reports on the state of nature. However, the commitment by governments –and others– to monitor people-nature relations is much less clear.



Current monitoring priorities are shaped by governance traditions (i.e. social norms and expectations) and resource limitations

Collecting, sharing and using data about people-nature relations can help environmental practitioners understand how communities interact with their environments, shaping both ecological outcomes, economic planning and human wellbeing. PNR data can provide insights into patterns of green and blue space use, changes in cultural values, community environmental behaviours, and levels of ecological literacy. These insights can be important to inform policies that support biodiversity, climate resilience, and inclusive nature activities, as well as health, transport, education and many more.

Understanding how people interact with nature in the ACT requires drawing on a range of data sources, which will vary in scope, method, and purpose.

Administrative data

Some PNR-related data is already collected within the ACT by governments and other governance actors for administrative purposes. The ACT currently maintains a government data portal, where a range of datasets that could be used to infer PNRs are made available¹⁴.

¹⁴ City and Environment Directorate, 2025, ACT Government Geospatial Data Catalogue. Available at: <https://actmapi-actgov.opendata.arcgis.com/>

PNR-related data is collected and shared about the use of urban and remote greenspace use. Much of this comes from track counters at the entrances to parks and reserves, which record foot and vehicle traffic, providing valuable insights into visitation trends without requiring direct engagement with users. The Parks and Conservation Traffic Counters dataset¹⁵ is an example of this, capturing usage data across multiple sites to inform infrastructure planning, resource allocation, and environmental impact assessments. Notably, however, this method does not capture motivations or experiences of visitors.

PNR-related data is also collected and shared in relation to volunteer participation. This data provides critical insights into the scale, scope, and impact of community contributions to environmental stewardship. In the ACT, many organisations collect this data through direct engagement with volunteer program managers and community groups, often relying on informed estimates and internal reporting. Metrics such as volunteer hours, participation rates, and conservation outcomes are commonly used to demonstrate community engagement with nature. The ACT Environmental Volunteer Report¹⁶ summarises this approach, highlighting the contributions of over 90 volunteer groups engaged in activities such as weed control, wildlife care, citizen science, and land restoration. Despite challenges in quantifying outcomes, the report estimates that volunteers contribute over 300,000 hours annually (equivalent to more than \$21.5 million in wage value). This data contributes to recognising volunteer value, informing policy, and securing funding for future environmental initiatives.

There are also likely to be a wide range of PNR-related data that appears in ad-hoc locations. For example, the Urban Tree Canopy Coverage report of the former Transport Canberra and City Services department of the ACT Governments includes statistics about the acceptance and refusal rates and reasons for tree planting across different parts of Canberra¹⁷. There is also likely to be PNR-related data that is collected, but is not reported or shared anywhere, such as participation numbers in training or events related to the environment.

Social surveys

Another source of PNR-related data is social surveys, which are in-person, telephone, or online questionnaires that provide information about respondents' experience, understanding or attitudes. A prominent example is the ACT Parks and Reserves Visitor Survey¹⁸, which is conducted by the ACT Parks and Conservation Service to gather insights into who uses the ACT's nature spaces, how they are used, and what improvements could enhance visitor experiences. The survey has previously combined online responses with face-to-face interviews in locations like Tidbinbilla and Namadgi, providing valuable data on motivations, satisfaction, and community expectations. Such approaches are vital for informing locally relevant planning and fostering meaningful connections between people and nature.

Other surveys such as the ACT Health and Wellbeing Survey¹⁹ and the Regional Wellbeing Survey²⁰ explore connections between environmental settings and quality of life. These surveys are typically designed by research institutions in collaboration with government agencies, enabling robust data collection across diverse population groups. While not always framed explicitly in terms of people–nature relations, they provide valuable indicators of environmental attitudes, access to green spaces, and the role of nature in

¹⁵ City and Environment Directorate, 2025, ACT Government Geospatial Data Catalogue. Available at: https://www.data.act.gov.au/Government-and-Transparency/Parks-and-Conservation-Traffic-Counters/eeerp-hh34/about_data

¹⁶ Office of the Commissioner for Sustainability and the Environment, 2024. ACT Environmental Volunteers Report. Available at: <https://envcomm.act.gov.au/latest-from-us/act-environmental-volunteers-report/>

¹⁷ Transport Canberra and City Services Directorate, 2021. Urban Tree Canopy Coverage - Report to the Legislative Assembly of the Australian Capital Territory. Available at: https://www.cityservices.act.gov.au/_data/assets/pdf_file/0009/1887696/Urban-Tree-Canopy-Coverage-Report.pdf

¹⁸ ACT Parks and Conservation Service, 2026. ACT Parks and Reserves Visitor Survey. Available at: <https://yoursayconversations.act.gov.au/act-parks/act-parks-and-reserves-visitor-survey>

¹⁹ Health and Community Services Directorate, 2023. CBR Health and Wellbeing Study. Available at: <https://www.act.gov.au/privacy-and-data-collection/cbr-health-and-wellbeing-study>

²⁰ University of Canberra, 2025. Living Well in the ACT Region. Available at: <https://www.regionalwellbeing.org.au/living-well-in-the-act-region/>

supporting mental and physical health. Their findings contribute to broader understandings of community resilience, regional planning, and the integration of nature into everyday life.

Academic research

Another source of PNR-related data for the ACT is academic research, which can provide evidence-based insights into how people relate to nature in different contexts. There have been various ad hoc in-depth qualitative pieces of academic work being carried out with specific groups over the years, such as with community gardeners²¹ and local food sector participants²², as well as qualitative analyses, such as those focusing on greenspace use across Canberra²³.

Other routine reporting

Some PNR-related data can also be found in routine reporting on the environment more broadly. The ACT State of the Environment Report, last published in 2023²⁴, fulfills the statutory role of the Commissioner for Sustainability and the Environment by providing independent analysis of the Territory's environmental health. It evaluates seven key themes: climate change, human settlements, air, land, biodiversity, water, and fire. It is stated that consistent indicators that support long-term trend analysis and informed decision-making are used. While the 2023 ACT State of the Environment Report does not explicitly frame people-nature relations (PNRs) as a distinct category, it highlights several themes that are relevant to understanding these connections. The report recognises the importance of Ngunnawal knowledge and custodianship, acknowledging the deep cultural and spiritual ties between Indigenous communities and Country. It also emphasises the role of community leadership in environmental management, including volunteering and local stewardship, which are key expressions of how people engage with nature. The impacts of the Black Summer bushfires are discussed not only in ecological terms but also in relation to community resilience, highlighting the mutual relationships between people and ecosystems. Broader themes such as urban boundaries and the transition to a circular economy further reflect how people shape and are shaped by their environment.

PNR-related data and associated discussion can also be found in other publications of the Commissioner for Sustainability and the Environment, including the Close to the Edge report on the effects of urban expansion on the environment of the ACT²⁵. Insights from reports such as these, although embedded within broader environmental assessments, point to a growing recognition of the complex and dynamic relationships between people and nature in the ACT.

²¹ University of Canberra, 2021. ACT Community Garden and City Farm gardeners: addressing the climatic and COVID-19 challenges of 2020. Available at: <https://www.canberra.edu.au/about-uc/faculties/health/future-of-food/assets/ACT-Community-Gardens-addressing-the-environmental-and-COVID-19-challenges-of-2020.pdf>

²² Environment, Planning and Sustainable Development Directorate, 2024. Canberra Region Local Food Strategy. Available here: https://www.act.gov.au/_data/assets/pdf_file/0003/2624673/canberra-region-local-food-strategy-2024-2029.pdf

²³ Butler, F. (2019) A GIS Investigation of Access to Greenspace in Canberra, Australia. Honours thesis submitted to the Australian National University. <https://openresearch-repository.anu.edu.au/server/api/core/bitstreams/f40ad2d0-6b0e-4852-8ea6-d1070079f8ec/content>

²⁴ Office of the Commissioner for Sustainability and the Environment, 2022. ACT State of Environment Report. Available here: <https://envcomm.act.gov.au/state-of-the-environment/>

²⁵ Office of the Commissioner for Sustainability and the Environment, 2025. Close to the Edge: An Investigation into the effects of urban expansion on the environment of the ACT. Available here: https://envcomm.act.gov.au/wp-content/uploads/2025/05/OCSE_Close-to-the-Edge.pdf

Future Opportunity: Establish baseline understandings of people-nature relations in the ACT

There is great potential to establish baseline understandings of people-nature relations in the ACT across a range of different metrics. Current data collection methods tend to be fragmented and directed to specific organisational needs, making it difficult to track long-term trends or support coordinated planning. Existing reporting frameworks, such as the ACT State of the Environment Report, do not yet have a strong and distinct focus on people–nature relations, and there is scope to introduce a dedicated section to report on the status and trends of PNRs, which could also integrate Indigenous knowledge, citizen science, and other socio-ecological insights.

Effectively monitoring people–nature relations (PNRs) could also benefit from a broader understanding of how individuals and communities connect with nature in everyday life, including qualitative metrics to include cultural, emotional, and recreational dimensions. For example, relationships such as spiritual ties to Country, enjoyment of green spaces, or the mental health benefits of time spent outdoors could help build more inclusive and responsive environmental strategies that take account of the lived experiences and values of ACT residents and visitors. A wider set of tools, such as participatory mapping and new survey instruments, could help build a more inclusive evidence base. It is critical that these tools are culturally appropriate and designed and used in partnership with the Ngunnawal/Ngunawal people where relevant. Pairing spatial datasets like ACTmapi with lived experience data could also offer more holistic views of how people interact with nature.

Theme	Some example metrics for people-nature relations
Access & Participation	Number of park visits; volunteer hours; participation in citizen science programs
	Perceived ease of access to green spaces; sense of belonging in nature
Cultural Connection	Number of cultural heritage sites managed or visited; Nature connection psychometric scale
	Depth of cultural identity linked to Country/Nature; weaving of Indigenous knowledge, Western knowledge and ecocultural identity
Wellbeing & Health	Frequency of nature-based activities (e.g. walking, gardening); nature prescriptions issued
	Reported mental health benefits; feelings of calm, joy, or restoration in nature
Education & Literacy	Number of schools with outdoor learning programs; biodiversity education events
	Ecological literacy levels; confidence in identifying local species
Stewardship & Care	Number of active environmental groups; hectares restored or maintained
	Motivation to care for nature; sense of responsibility or pride in local landscapes
Policy & Planning	Inclusion of PNR indicators in policy documents; funding allocated to PNR programs
	Influence of community voices in environmental decisions

Monitoring people–nature relations requires careful consideration of both quantitative and qualitative methods. Quantitative metrics such as park visitation rates, volunteer hours, or biodiversity indicators offer comparability and ease of integration into policy frameworks. However, they often miss the depth of cultural, emotional, and experiential dimensions that shape how people value and interact with nature. Qualitative

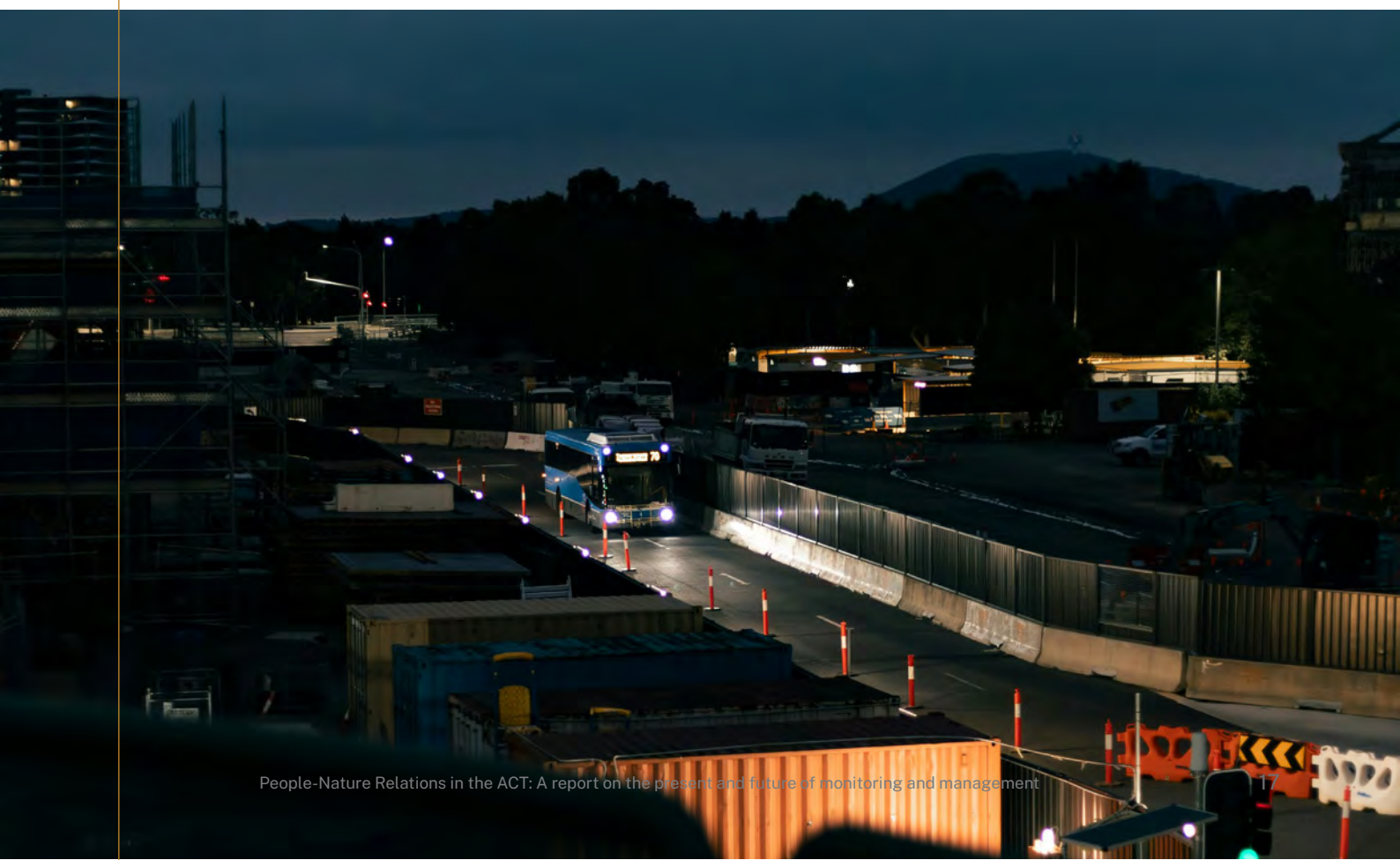
approaches, including interviews, participatory mapping, and narrative accounts, capture these nuances but can be resource-intensive and harder to standardise for decision-making. Exploring the trade-offs between these approaches is essential for designing monitoring systems that are both robust and meaningful. Combining them through mixed-method strategies can provide actionable insights while ensuring that policy reflects lived experience alongside measurable outcomes

Developing a wider set of shared indicators could help to support cross-sector collaboration, inform policy, and align with wellbeing frameworks, while also recognising the lived experiences and diverse relationships people have with the environment. To move forward, the ACT could invest in integrated data systems, cross-sector partnerships, and community-led approaches. By doing so, the ACT can lead in developing inclusive, responsive, and future-focused environmental strategies.

Collecting and using data on people–nature relations raises important questions about governance, ownership, and ethical responsibility. These challenges are particularly significant when incorporating Indigenous knowledge and cultural perspectives, which require consent, relational accountability, and respect for custodianship. Standard data-sharing practices may not align with Indigenous protocols, and there is a risk of misappropriation or misuse if safeguards are not in place. Establishing clear agreements on data sovereignty, culturally informed consent processes, and co-designed governance frameworks is essential to ensure that monitoring systems uphold trust and equity while supporting inclusive environmental decision-making.

As the ACT faces growing environmental pressures and social change, there is a clear opportunity to strengthen how PNRs are understood, monitored, and integrated into decision-making. This includes enhancing data collection, sharing and use, and deepening cross-sector collaboration. The ACT has great potential to strengthen cultural connections to Country, and embed nature more fully into everyday life across urban, regional, and protected landscapes.

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Glossary

PNR (People–Nature Relations)	The diverse ways individuals and communities imagine, value and interact with the rest of the natural world.
ACT (Australian Capital Territory)	A territory in southeastern Australia, home to Canberra, the nation’s capital.
Ngunnawal/Ngunawal Country	The ancestral, spiritual, and cultural homeland of the Ngunnawal/ Ngunawal people, encompassing the ACT region.
Ecological Literacy	Understanding ecological systems and the role humans play within them, including knowledge of biodiversity, sustainability, and conservation.
Regenerative Agriculture	Farming practices that restore soil health, biodiversity, and ecosystem function, often aligned with climate resilience and sustainability goals.
Urban Greening	The integration of vegetation and green infrastructure into urban environments to support biodiversity, wellbeing, and climate adaptation.
Protected Areas	Land designated for conservation, including national parks, nature reserves, and cultural heritage sites.
Geospatial Tools	Digital mapping platforms (e.g. ACTmapi) used to visualise and analyse spatial data related to land use, biodiversity, and infrastructure.
Volunteer Reporting	Data collected from community members participating in environmental activities, such as bushcare, wildlife monitoring, and land restoration.

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Dr. Rachael Gross is a Research Fellow in the Centre for the Public Awareness of Science. Dr. Gross is a geographer and reformed ecologist. Working at the intersection of decolonial pedagogy, landscape science and community development, Rachael works with and for communities on integrating cultural values into environmental management as well as developing a global Indigenous-led framework to decolonise protected areas.



Dr. Jasper Montana is a Senior Lecturer in the Centre for the Public Awareness of Science. Dr Montana's research examines and experiments with the workings of environmental expertise, including relationships between science and policy, theories and practices of inter-and transdisciplinary research, and the role of knowledge, norms, numbers and technologies in environmental governance. He has a particular interest in biodiversity loss, nature conservation and nature restoration as complex societal challenges.

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