

Wildlife Management Program for the Magpie Goose (*Anseranus semipalmata*) in the Northern Territory of Australia 2020-2030

Mid-term Review 2025



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1.0	24/10/2025	Mike Welch	Draft for stakeholder consultation
2.0	10/12/2025	Mike Welch	Final addressing stakeholder feedback and internal review

Cover photo: Flora and Fauna Division staff undertaking consultation with Aboriginal ranger group on results of Magpie Goose population monitoring and habitat management activities.

Summary

A mid-term review was undertaken in 2025 of the [Wildlife Management Program for the Magpie Goose \(*Anseranus semipalmata*\) in the Northern Territory of Australia 2020-2030](#) (Magpie Goose Management Program). The objectives of the review were to assess the degree to which actions and associated performance measures specified in the Program have been achieved to date; consult with key stakeholders to identify any major gaps or issues that need to be addressed to assist in meeting program objectives; and if appropriate, amend performance criteria and actions to ensure that they are effective and achievable for the remainder of the program.

Specific actions that were undertaken during the review include:

1. Review progress against key outcomes, performance measures and actions specified in Table 8 of the Magpie Goose Management Program and other relevant statements and commitments throughout the document
2. Consultation with key land management stakeholders on activities undertaken to manage goose habitats across the Top End of the NT
3. Assess consistency between the Magpie Goose Management Program and current Government policies
4. Present findings of the review to stakeholders as a draft report, to seek feedback and identify any major issues and/or areas of improvement for the remaining five years of the program
5. Finalise and publish review report and if required, update the Magpie Goose Management Program.

The review found that progress has been made towards achieving most of the outcomes and associated performance measure and actions specified in the Magpie Goose Management Program. Some key findings include:

- The Magpie Goose population remains stable, although the likely arrival of avian influenza is a key threat to population viability.
- Land holders/managers are undertaking regular habitat management activities to protect and restore feeding and nesting areas on Top End floodplains that are essential to Magpie Geese but more information is needed to assess their effectiveness.
- Ongoing annual monitoring of the Magpie Goose population is crucial to ensuring that their harvest is sustainable in the face threats to habitat quality (e.g. weeds, feral animals) and disease.
- There are challenges with assessing the level of harvest associated with both Aboriginal traditional use and recreational hunting on the Magpie Goose population, with significant room for improvement in the provision of annual returns.
- There should be improved communication and engagement with key stakeholders, including land holders/managers, horticulture industry, recreational hunting groups and Aboriginal ranger groups.

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1. Introduction

1.1. Management Program

The [Wildlife Management Program for the Magpie Goose \(*Anseranus semipalmata*\) in the Northern Territory of Australia 2020-2030](#) (Magpie Goose Management Program) is a legal instrument under the *Territory Parks and Wildlife Conservation Act 1976* (TPWC Act). It sets out the management protocols to ensure the long-term conservation of wild populations of the Magpie Goose and its habitats in the Northern Territory (NT), in the context of continuing sustainable harvest.

The objectives of the Magpie Goose Management Program are:

1. To conserve and protect Magpie Goose in the NT in its natural habitat.
2. To promote sound management of important areas of habitat to address impacts of current and future threats including climate change.
3. To ensure and support the sustainable use of Magpie Goose populations. Sustainable use includes ethical recreational hunting and commercial offtake in accordance with objectives 1 and 2 and the inalienable right of traditional hunting.
4. To minimise economic loss to commercial fruit growers caused by Magpie Goose without adversely impacting on conservation of the species.
5. To enable ongoing refinement of Magpie Goose management through timely evaluation of management prescriptions and performance with opportunities for stakeholder input.

1.2. Review Approach

In accordance with Section 5.2 of the Magpie Goose Management Program, a review was conducted in the fifth year of operation, informed by annual monitoring outcomes and ongoing stakeholder input.

The objectives of the review were to:

- Assess the degree to which specified actions and associated performance measures have been achieved to date
- Consult with key stakeholders (Table 1) to identify any major gaps or issues that need to be addressed, to assist in meeting program objectives.
- If appropriate, amend performance criteria and actions to ensure that they are effective and achievable for the remainder of the program

Table 1. Key stakeholders consulted during review

Stakeholder Category	Stakeholder Organisations/sub-categories
Hunting	NT Field and Game NT Firearms Council SSAA Darwin Branch
Goose habitat managers	Aboriginal ranger organisations NT Parks and Wildlife Parks Australia (Kakadu) Pastoralists
Agriculture industry	NT Farmers Mango Growers Association Department of Agriculture and Fisheries

Specific actions that were undertaken during the review include:

1. Review progress against key outcomes, performance measures and actions specified in Table 8 of the Magpie Goose Management Program and as relevant, other statements/commitments throughout the document
2. Consultation with key land management stakeholders on activities undertaken to manage Magpie Goose habitats across the Top End of the NT
3. Assess consistency between the Magpie Goose Management Program and current Government policies
4. Present findings of Actions 1-3 to key stakeholders as a draft report, to seek feedback and identify any major issues and/or areas of improvement for the remaining 5 years of the program
5. Meet with interested stakeholders to provide clarification on any aspects of the review and discuss their feedback
6. Finalise and publish review report and if required, update the Magpie Goose Management Program.

To inform the review of Magpie Goose habitat management activities (Action 2), the following land holders/managers were contacted to request information on habitat management activities in Magpie Goose habitat from 2020-2025:

- Aboriginal ranger groups (14)
- Pastoral properties (9)
- Natural Resource Management groups (1)
- NT Parks and Wildlife
- NT Government Weed Management Branch
- Parks Australia (Kakadu)

2. Review Findings

Each of the five objectives of the Magpie Goose Management Program and the progress in achieving associated outcomes, actions and performance measures are discussed below. Details of each action and performance measure are also presented in Appendix A, including comments and any proposed amendments.

Objective 1: Conserve and protect Magpie Goose in the NT in its natural habitat

Overview

The Magpie Goose (*Anseranus semipalmata*) is the sole member of the family Anseranatidae and, despite significant declines elsewhere in Australia associated with European settlement, they remain abundant in their natural habitats within the NT. Magpie Geese are an iconic species in the NT, popular for recreational hunting, a traditional and ongoing food source for Aboriginal people and are often depicted in tourism images promoting the Territory.

Magpie Geese are a protected wildlife species and classified as 'least concern' under the *Territory Parks and Wildlife Conservation Act 1976*. Annual monitoring indicates that the Magpie Goose population is subject to substantial variation between years (Figure 1). During the 2020-2025 period, the population has generally been between 1 and 1.5 million. A large proportion of the nesting habitat occurs in national parks (i.e. Kakadu, Mary River and Djukbinj) as well as Indigenous Protected Areas in Arnhem Land and the western Top End. These areas are primarily managed for conservation values but are still subject to substantial impacts from feral animals and weeds.

A key activity undertaken under the Magpie Goose Management Program is an annual post-Wet Season aerial survey across coastal floodplain habitats in the Top End, timed to coincide with the period when birds are nesting and the population is at its most geographically concentrated. The monitoring program commenced in 1983 and the long-term annual population trend data plays a crucial role in assessing the health of the Magpie Goose population, in response to environmental conditions and harvest by humans.

Rainfall is the primary driver of population change for Magpie Geese in the NT. Over the past five years the Top End has experienced two average and three above average wet seasons, so it would be predicted that the Magpie Goose population should have increased more than has been observed over this period. Factors such as weeds and damage from introduced buffalo and feral pig are likely to impact nesting habitat and key food resources (see Objective 2), potentially limiting the ability for the population to respond rapidly to favourable years.

The likely arrival of highly pathogenic avian influenza (HPAI H5N1 clade 2.3.4.4b, hereafter referred to as HPAI) in Australia is also considered a potential major threat to the Magpie Goose population. Wild aquatic birds - particularly ducks and geese as well as shorebirds, gulls and terns - serve as the primary reservoirs for avian influenza viruses. Migratory and nomadic waterbirds can disperse viruses across long distances through faecal shedding, contaminated water, and direct contact. The coastal floodplains of the NT are considered to be high-risk geographic locations where both the entry and exposure risks converge and are also areas that support dense waterbird populations.

The Magpie Goose is considered to be a vulnerable species to HPAI. While specific studies on the species and the impacts of HPAI are limited, we can draw on broader insights into HPAI ecology among wild

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waterfowl elsewhere. HPAI has unprecedented spillover capability, infecting diverse wild waterfowl species worldwide and causing more severe outbreaks than any other lineage.

Management response to the arrival of HPAI in the Northern Territory will be through Emergency Management at the catchment level. Vaccination or translocation are not viable options for management of wild bird populations in the NT. Instead, actions will focus on preparedness (e.g. mitigating existing threats via feral animal and weed control), response (e.g. carcass removal/disposal from some locations, management of public access to infected areas) and recovery (e.g. population monitoring, harvest management).

In relation to mitigation of the potential impacts of HPAI, DLPE is working closely with NT and Commonwealth agencies to develop plans to manage Magpie Goose habitats and, where appropriate, seek funding to undertake specific habitat management activities (e.g. weed and feral animal control in key breeding sites). In the event of an outbreak of HPAI in the NT, it may be necessary to modify the recreational waterfowl hunting season to protect both hunters and wildlife. Any decision will occur after close consultation with key stakeholder groups.

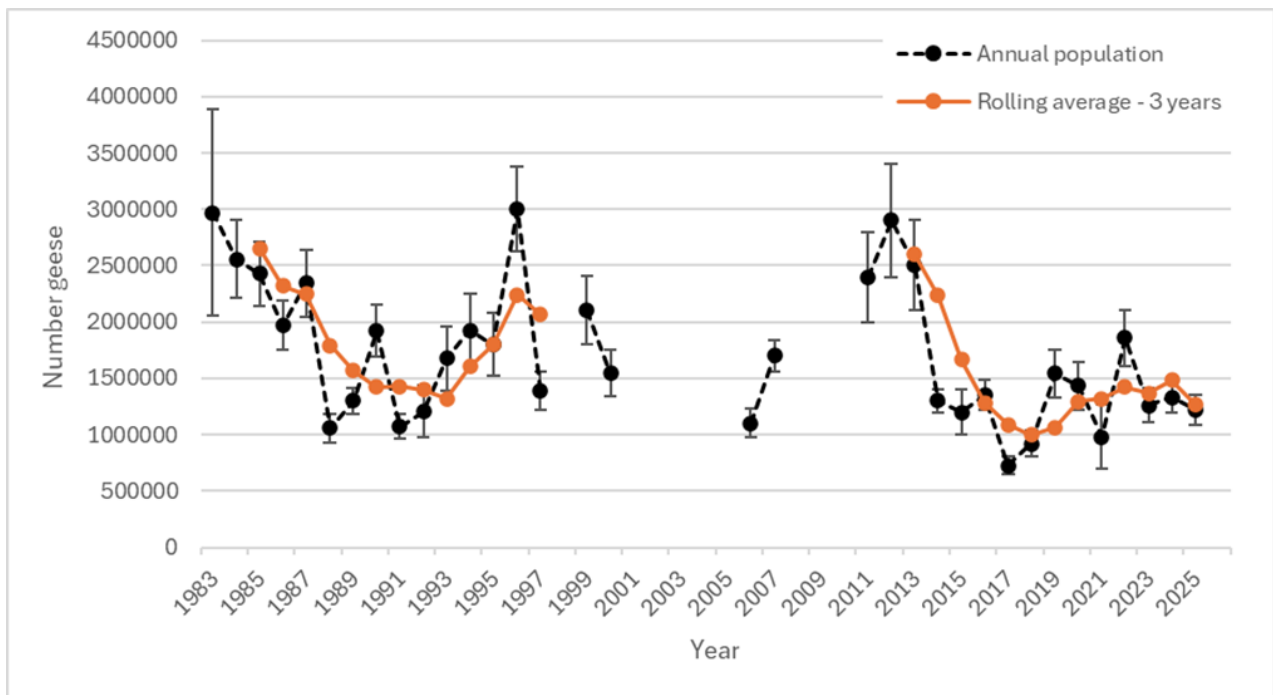


Figure 1. Long term population trend of Magpie Goose 1983 – 2025 (end of Wet Season surveys)

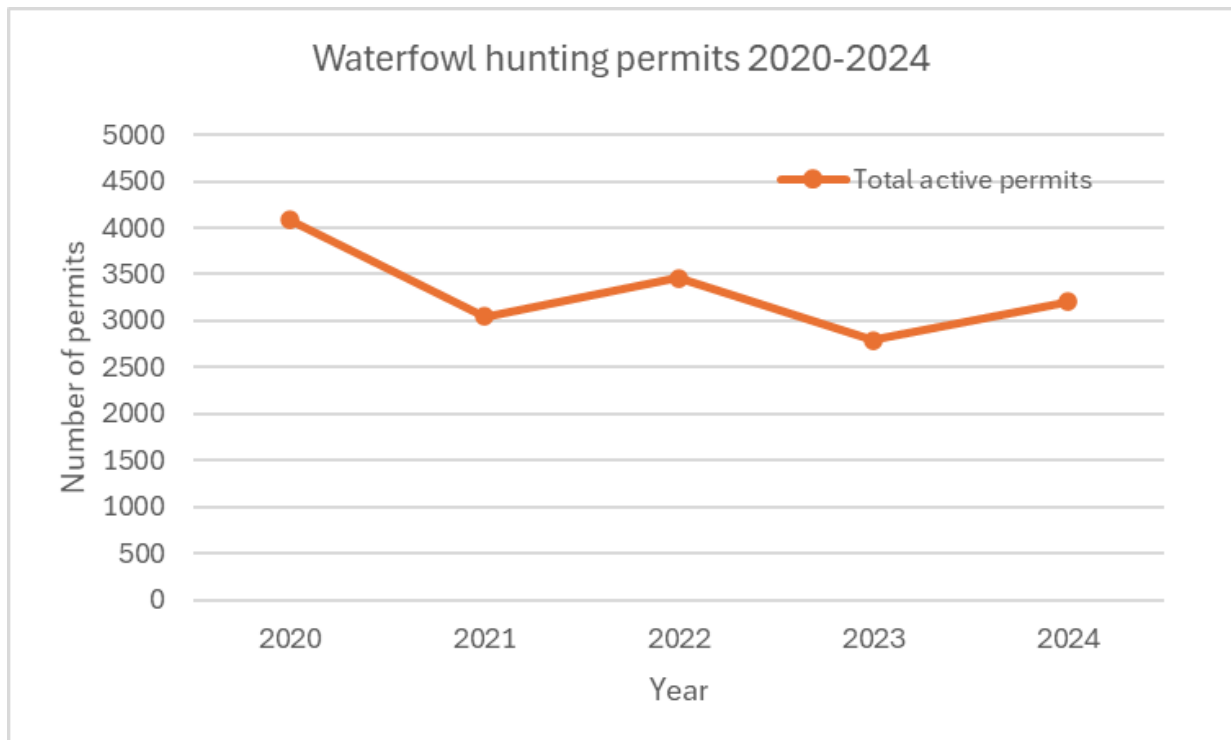


Figure 2. Trend in numbers of recreational waterfowl hunting permits 2020-2024

Summary of progress

The four actions and associated performance measures for this objective are considered to have progressed adequately (Appendix A).

Surveys and population estimates have been completed in all years and reports published on the NT Government website (see [here](#)). Survey data are also made available via the [NR Maps](#) platform and when specific requests from stakeholders are made.

An assessment of the size of take by Aboriginal hunters has not been actioned to date, as resources have not been available. However, anecdotally it appears that usage patterns are likely to be unchanged or decreased due to a reduction in firearm ownership in remote communities. Where resources allow, priority will be given to gaining a contemporary understanding of the level of Aboriginal traditional harvest during the remainder of the Magpie Goose Management Program. This could be informed through a range of data sources, such as firearm registration information in remote areas, ammunition sales by suppliers and direct engagement with communities.

The level of take of Magpie Geese associated with recreational hunting and pest mitigation appears to have decreased slightly over recent years (Figure 2 and Figure 6, respectively) but see Objective 3 regarding uncertainties in harvest levels.

Compliance activities undertaken by Parks and Wildlife during the annual waterfowl hunting season generally indicate that recreational hunters are compliant with their permit conditions.

Some minor amendments being made to clarify the actions relating to making Magpie Goose population data available (Appendix A).

Objective 2: Promote sound management of important areas of habitat to address impacts of current and future threats including climate change

Overview

Management of Magpie Goose floodplain nesting and feeding habitats is crucial to the long-term stability of their population. Floodplain habitats across the Top End occur within a variety of land tenures, with the majority found within Aboriginal freehold, parks/reserves and pastoral leasehold properties. As noted in the Magpie Goose Management Program, 31% or 1,376 km² of key Magpie Goose floodplain habitat in the western Top End lies within existing parks and reserves, most notably the Mary River and Kakadu National Parks.

Magpie Geese habitat protected within National Parks and Reserves are complemented by extensive areas of habitat on Aboriginal lands, which are actively managed by ranger groups across the Top End. Significant habitat also occurs on pastoral leases, especially in the Adelaide River-Kakadu and Daly River regions. Pastoral activities rarely conflict with Magpie Goose habitat values and in some cases management is actively improving habitat quality, such as through concerted efforts to control floodplain weeds. However, there is potential for conflict between pastoral land use and habitat conservation when improved pasture species are utilised in floodplain habitats.

In the NT, it is the landowner's responsibility to control feral animals and declared weed species. Key weed species found on Top End floodplains include Mimosa (*Mimosa pigra*) and Olive Hymenachne (*Hymenachne amplexicaulis*). Both species are listed as [Weeds of National Significance](#) and respectively declared as Class A and B weeds under the NT *Weeds Management Act 2001*. Mimosa forms an impenetrable thicket and displaces the grasses and sedges needed by Magpie Geese for food and nesting. Olive Hymenachne is a grassy weed known to replace areas of wild rice, which is a favoured food plant for geese. Replacement of native floodplain grasses by introduced pasture species (especially para grass *Urochloa mutica* and aleman grass *Echinochloa polystachya*) also present a significant long-term threat to Magpie Goose populations.

There are significant negative impacts from feral pigs (*Sus scrofa*), and unmanaged swamp buffalo (*Bubalus bubalis*) on floodplain habitats across the Top End. In particular, buffalo cause substantial environmental change in the seasonal wetlands of the NT through reducing vegetation cover, accelerating erosion, increasing rates of drainage and subsequent premature drying of swamps, and causing saltwater intrusion into previously freshwater areas.

Summary of Progress

Three of the four actions and associated performance measures for this objective are considered to have progressed adequately, with the action/performance measure relating to land managers/holders treating habitats for weeds and pest animals being partially progressed (Appendix A). In some areas, the level of habitat management implementation is challenging to assess and more focus is needed on regular engagement with land managers (particularly pastoral lands) to assess, provide advice on and encourage actions.

Formal management plans exist for several key areas of Magpie Goose habitat, including NT parks/reserves within the Adelaide-Mary River floodplains and Kakadu National Park within the Alligator Rivers Region. Within these management plans, the importance of managing floodplain habitats is generally well-recognised and associated activities are specified (e.g. weed and feral animal management).

Summaries of available information on Magpie Goose habitat management activities by land holders/managers are provided for the Arnhem Land (Figure 3), Adelaide-Alligator Rivers (Figure 4) and Moyle to Finniss River (Figure 5) regions. It is noted that this is unlikely to represent all the habitat management activities, as some land holders/managers did not respond within the timeframe of this review. During the remainder of the program, more focus will be placed on tracking and encouraging activities undertaken by land managers to manage Magpie Goose habitats.

There have been substantial efforts made by land holders/managers in many areas to mitigate impacts, although there is limited information available to measure or predict the influence of these on Magpie Geese populations. In particular, more than 17,000 buffalo have been removed from nesting and foraging habitats in Arnhem Land over the past five years. In addition, significant effort has been dedicated to control of key floodplain weeds such as Mimosa and Olive Hymenachne. Ongoing resourcing of these activities is often a challenge, as many were previously supported by Aboriginal Ranger Grant Program (e.g. via provision of aerial platform shooter training and funding for helicopters).

During the remainder of the program (and where resources are available) investigations will be made into drivers of population variability, such as through the development of habitat model(s) that utilise existing Magpie Goose and feral animal population data (ifrom annual aerial surveys) and remotely sensed data (e.g. high-resolution satellite imagery).

Minor amendments have been made to the action and performance measure associated with the dissemination of Magpie Goose spatial data, to reflect the fact that this is made available annually via uploads to the publicly-accessible [NR Maps](#) platform and provision of specific data on request, rather than via annual modelling outputs (Appendix A).

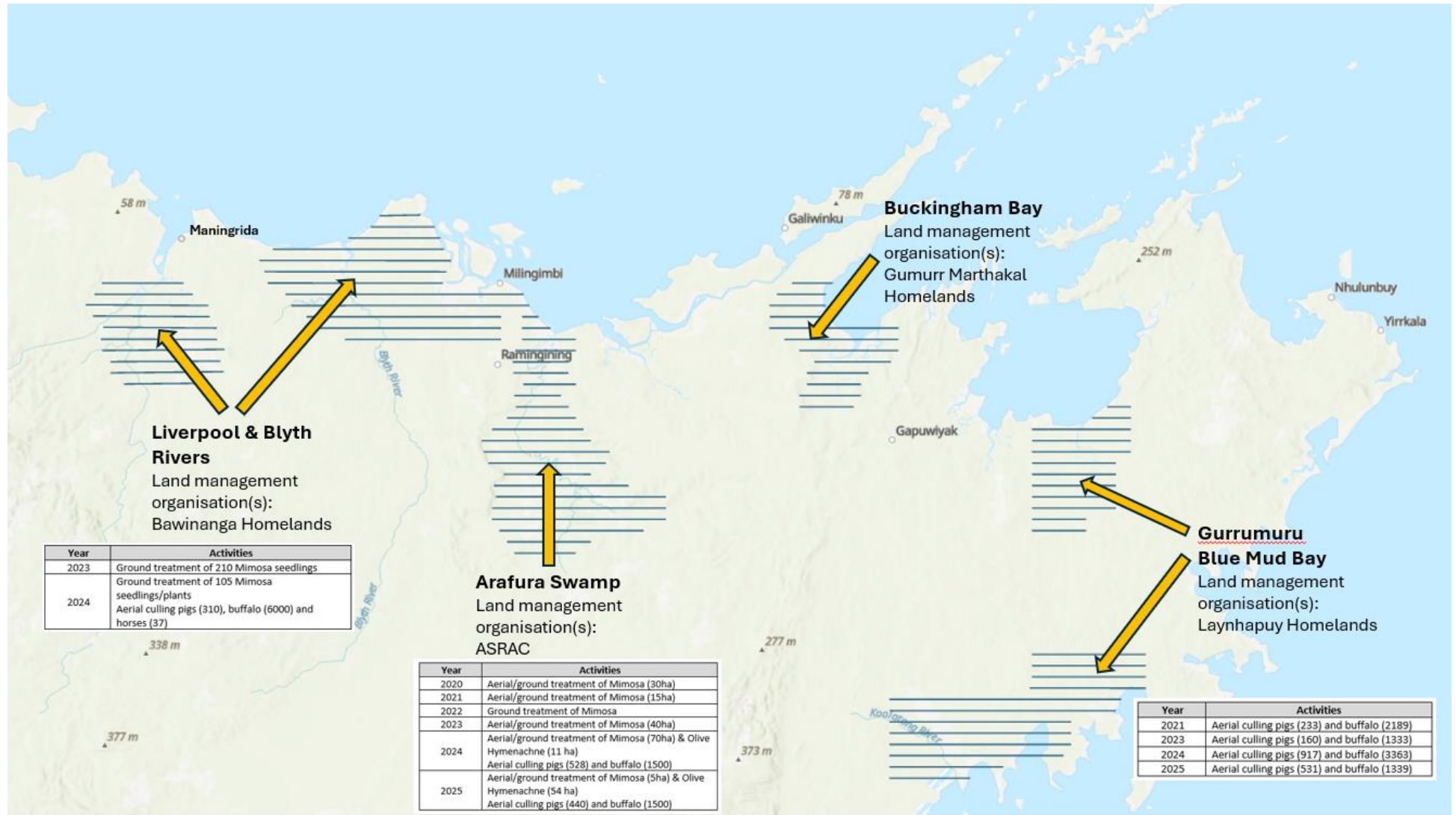


Figure 3. Summary of available information on Magpie Goose habitat management activities in Arnhem Land region 2020-2025

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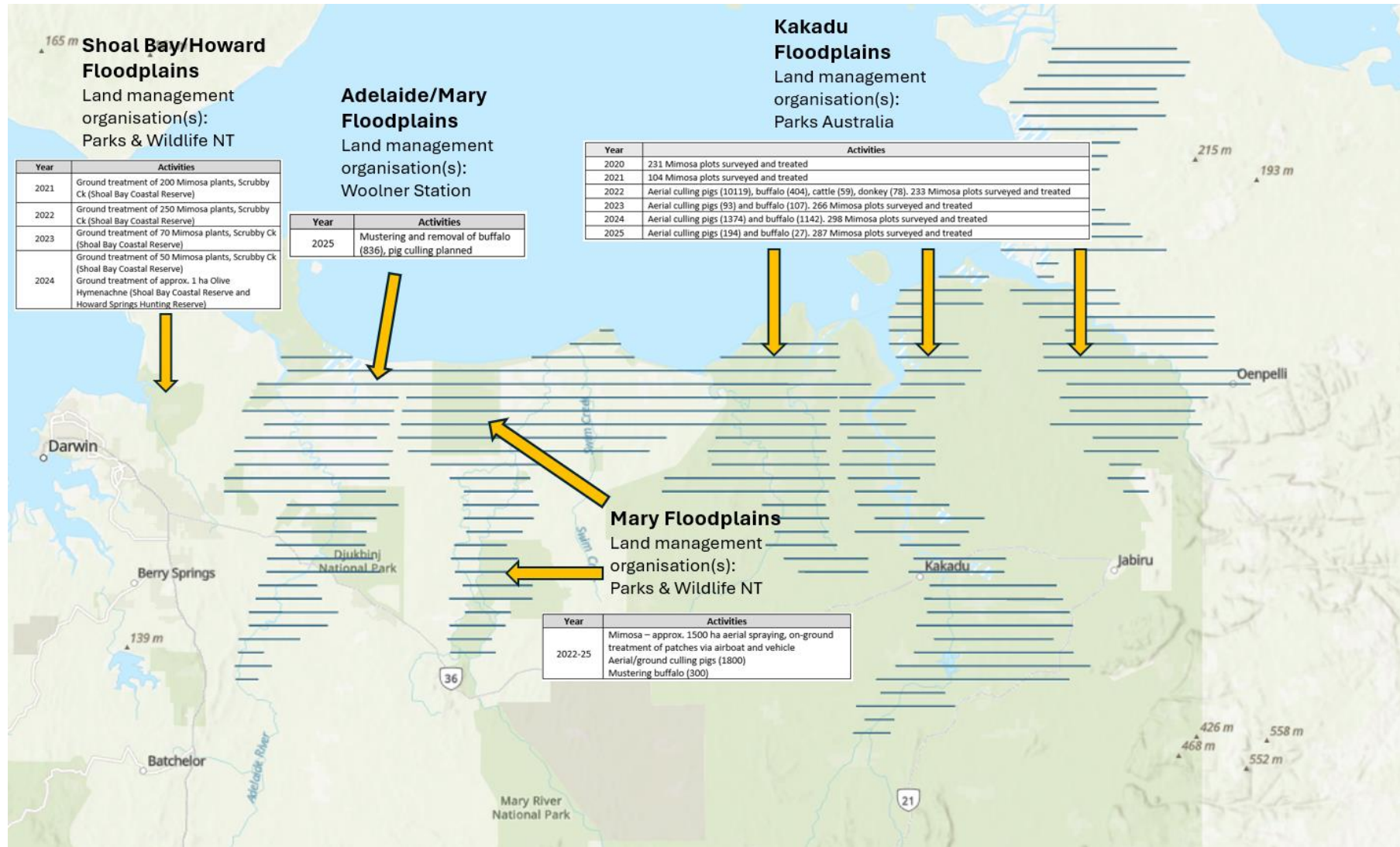


Figure 4. Summary of available information on Magpie Goose habitat management activities in Adelaide-Alligator Rivers region 2020-2025

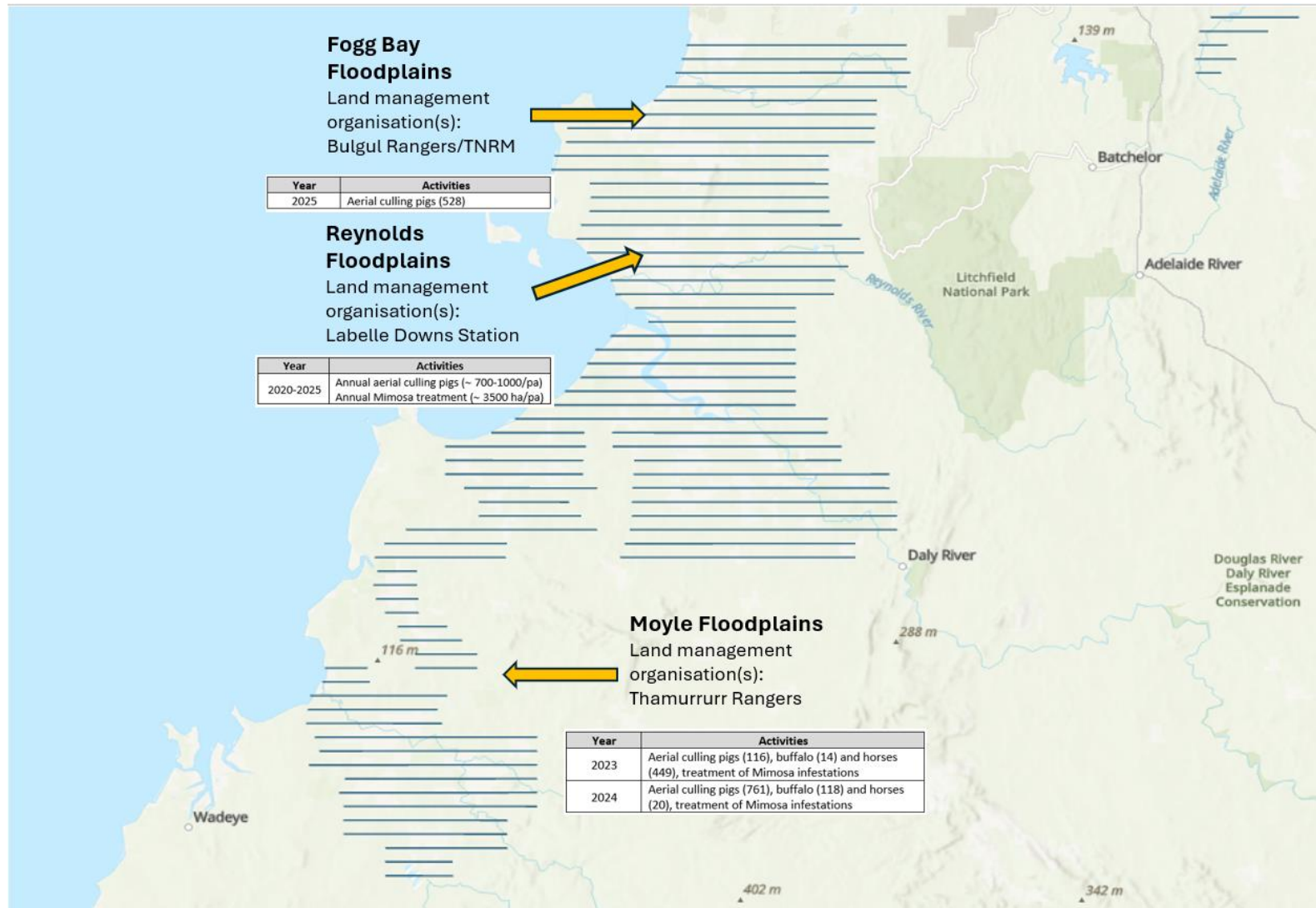


Figure 5. Summary of available information on Magpie Goose habitat management activities in Moyle to Finniss Rivers region 2020-2025

Objective 3: Support the sustainable use of Magpie Goose populations

Overview

Recreational hunting of Magpie Geese is important to many Territorians and contributes to the unique lifestyle of the NT. Similarly, magpie geese contribute to Aboriginal people's livelihoods across the Top End and have important cultural values.

The non-Aboriginal recreational harvest of Magpie Geese has been managed through the declaration of an annual waterfowl hunting season (via section 45 of the TPWC Act) and has historically been regulated by varying the duration of the hunting season, bag limits, and restrictions on types of firearms and ammunition. Hunting permits allow permit holders to hunt on any land, with landholder permission, and dedicated hunting reserves have been established since 1984 to provide additional hunting opportunities.

In relation to commercial harvest of Magpie Geese, when the Magpie Goose Management Program commenced in 2020 it was envisaged that demand could be up to 20,000 to 30,000 birds per year and provision was made for a minimum permitted commercial harvest of 5,000 birds per year, to protect infrastructure investment and market access for a viable industry. The covid pandemic was a major setback to the development of this industry.

A critical aspect to assessing the sustainable use of any wildlife population is understanding the proportion of the population that can be harvested without detrimental impact and what has been harvested in any given year. Hunting returns are important to inform management of Magpie Geese, as the bag limits assume certain levels of off-take. Returns are currently voluntary in the NT, whereas in other jurisdictions in Australia where waterfowl hunting is allowed, returns data is collected as follows:

- South Australia - mandatory hunting survey within 30 days end of permit (online or paper),
- Victoria - voluntary phone surveys of permit holder
- Tasmania - compulsory annual return (online or paper) by 30 November.

Summary of Progress

Five of the eight actions and associated performance measures for this objective are considered to have progressed adequately, with the action/performance measures pertaining to the development of a commercial harvest industry being partially progressed and the measure pertaining to monitoring of harvest offtake associated with recreational hunting not met (Appendix A). The issue of inadequate hunting returns is discussed in further detail below.

It is difficult to assess recreational hunting pressure on the Magpie Goose population, as waterfowl hunting permit returns are not compulsory, the rate of returns is very low, and this has decreased substantially over recent years - from 5.4% of permit holders in the 2020-21 season down to 0.31% for the 2024-25 season. This compares to an average return rate of around 21% between 2001 and 2018, with a maximum of 72.6% achieved in 2002. The lack of return data increases the uncertainty in assessing the level of recreational harvest. However, if it is assumed that the effort of individual hunters (e.g. frequency of hunting trips during a given season) has not increased over time (Figure 2), the fact that the number of recreational hunting permits has decreased slightly over the past five years likely indicates that the take of Magpie Geese has not increased during this period.

Potential options to improve data on the level of harvest associated with recreational hunting include:

1. Encouraging returns through stakeholder groups and potentially offering an incentive (e.g. draw for a prize, such as voucher to outfitter shop)
2. Making the submission of returns compulsory, via permit condition
3. Undertaking phone surveys, which have been found to be effective in other Australian jurisdictions

In relation to commercial harvest, there has been very limited uptake of this opportunity over the past five years. There is currently only one commercial harvest permit that equates to 1000 birds per year. It is unclear whether the demand for Magpie Goose meat may increase during the remaining term of the Magpie Goose Management Program but the minimum allocation of 5000 birds per year will be maintained for the remainder of the program, and then reviewed

Amendments have been made to the action and performance measure associated with setting sustainable recreational harvest offtake levels, to reflect the current NT Government policy of fixing the Magpie Goose bag limit for the next five years (Appendix A). The Department will continue to assess the sustainability of this approach annually, based on:

- Magpie Goose population estimate and nesting levels ascertained by late wet season aerial survey data
- The magnitude of the preceding wet season, which affects breeding success and population for the following year(s)
- Detection and observed impacts of avian influenza, should this arrive
- Proportion of the Magpie Goose population likely to be taken via the fixed bag limit.

Amendments have also been made by formulating performance measures (i.e. marked as 'to be determined' in the Magpie Goose Management Program) to meeting the outcomes of maintaining a) traditional hunting opportunities and b) social licence for sustainable use (Appendix A).

Objective 4: Minimise economic loss by commercial fruit growers from goose impacts without adversely impacting the conservation of the species

Overview

During the late dry season, Magpie Geese may visit farms in large numbers and damage horticultural crops by trampling, grazing, uprooting plants or consuming fruits (e.g. mangoes). Other horticultural crops (e.g. melons, papaya, grain) can be impacted across the wet season and into the early dry, although it is understood that movements of birds to breeding areas usually abates such damage.

The Department of Tourism and Hospitality (Parks and Wildlife), with advice from the Department of Lands, Planning and Environment (Flora and Fauna), issues permits to scare/destroy Magpie Geese and other pest bird species to mitigate crop damage. The strategies and tactics available to horticulturalists to mitigate damage (focusing on mango farms) was the subject a research project, undertaken from 2015-2018. This work contributed to the publication of an [Integrated Pest Management Strategy](#) in 2019.

Consultation with Department of Agriculture and Fisheries, NT Farmers and other relevant industry groups (e.g. Mango Growers Association) indicates that pest issues are variable between crop species/varieties and from year to year (e.g. depending on timing of fruiting and arrival of Magpie Geese in the wider Darwin region) but do not appear to have increased over recent years. This observation is supported by the relatively static numbers and size of pest mitigation permits over recent years (Figure 6).

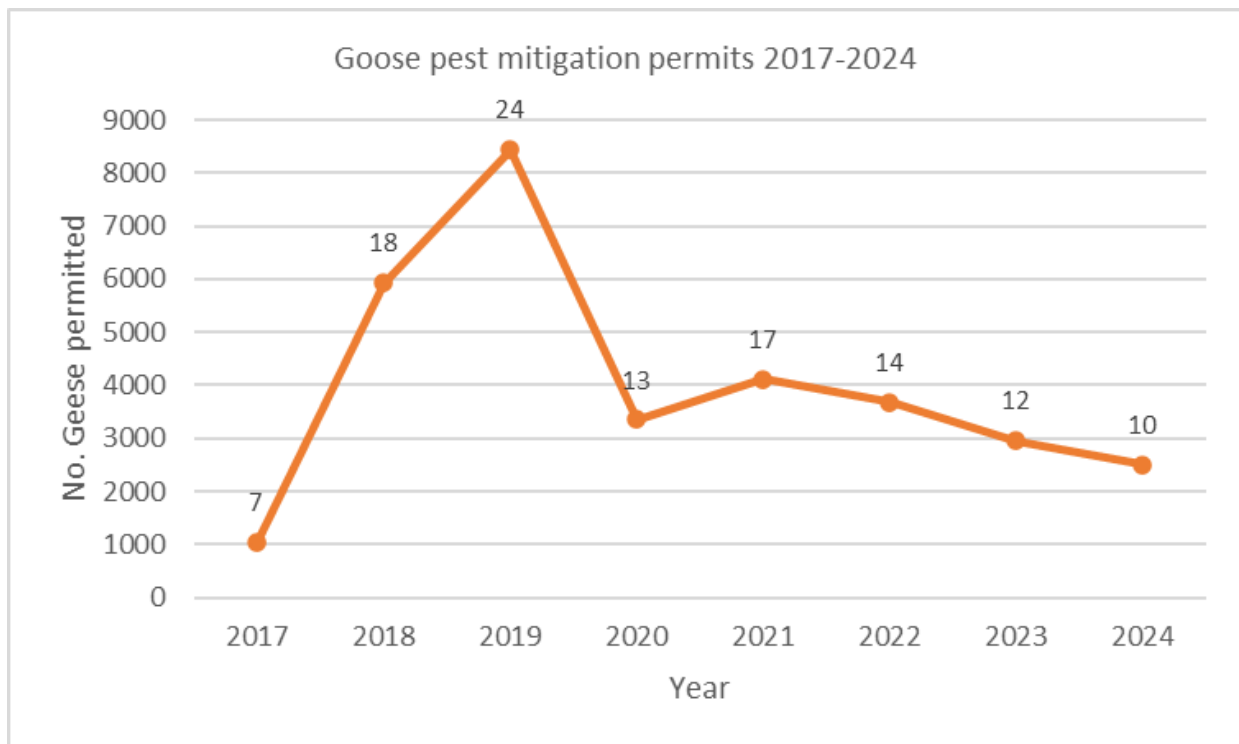


Figure 6. Trend in numbers of Magpie Goose subject to pest mitigation permits 2017-2024 (annotations = number of permits issued each year)

Summary of Progress

All three of the actions and associated performance measures for this objective are considered to have been adequately progressed, with the need identified for a more regular and consistent focus on engagement with key stakeholders on pest mitigation (Appendix A).

NT Farmers advised that some recent trials of emerging technologies (e.g. laser scaring devices) have been successful, although their applicability is likely to vary between crops (more likely applicable to low/ground crops vs tree crops).

Objective 5: Provide ongoing refinement of Magpie Goose management through timely evaluation of management prescriptions and performance with opportunities for stakeholder input

All three of the actions and associated performance measures for this objective are considered to have been met (Appendix A).

Overall progress

Overall, 13 out of 22 actions and associated performance measures for the Magpie Goose Management Program are considered to have been adequately progressed from 2020 to 2025, with the remainder being either partially addressed or not addressed. The following opportunities for improvement were identified:

- Increased frequency of stakeholder engagement
- Improved understanding of rates of harvest via:
 - Increased returns for recreational waterfowl hunting permits
 - Collation of relevant information to contribute to a contemporary understanding of Aboriginal harvest
- Further investigation of the drivers of population variability, such as through the development of habitat model(s) that utilise existing Magpie Goose and feral animal population data and remotely sensed data.

Appendix A – Detailed findings against actions and performance measures

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Objective 1: To conserve and protect Magpie Goose in the NT in its natural habitat							
Outcomes	Actions	Performance Measures	Action Officer	Partners	Timeline	Mid-term progress	Comments 2025 Review
Magpie Goose remains a protected species and its current (non-threatened) conservation status is maintained	Objective and transparent conservation assessment	Current and projected status as assessed against IUCN criteria is maintained	DLPE	Birdlife Australia	Ongoing, generally assessed every 5 years	Met	Magpie Goose remains listed on as 'Least Concern' under TPWCA. Most recent assessment in 2024 classified population trend as 'stable'.
Species remains abundant across the Top End and population processes are maintained	Publicly available distribution and abundance data regularly updated Publish annual population monitoring report	Population maintained between historical upper and lower thresholds and range size maintained	DLPE		Annual, July	Met	Annual aerial surveys indicate population is stable – reports published here . Avian influenza is potential major threat to population and work is being done by DLPE to compile plans and, where possible, gain funding to mitigate impacts to geese through habitat management activities (e.g. feral animal and weed control).
Ensure anthropogenic impacts are appropriately managed: a) Aboriginal take	Aboriginal take assessed	a) Aboriginal take is consistent with long term use patterns	DLPE	DTH, NLC	TBD	Not met	Formal assessment has not been undertaken but stakeholder consultation indicates that usage patterns are likely to be unchanged or decreased due to a reduction in firearm ownership in remote communities.

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b) Non-Aboriginal take	Maintain and implement recreational, commercial and damage mitigation offtake permits system	b) Non-Aboriginal offtake is regulated under permit with adequate compliance checking.	DTH	DLPE	Ongoing. Annual Compliance reporting (April). Annual Inspections (TBD) and review of commercial offtake (July)	Met	<p>Permits are issued in a timely manner. Regular compliance checks on hunting reserves, occasionally on private land.</p> <p>Formal reporting not undertaken by DTH and compliance activities reflect wider wildlife/park management issues and available resources.</p> <p>Neither recreational hunting effort or removal for pest mitigation appear to have increased over recent years:</p> <ul style="list-style-type: none"> • Number of recreational waterfowl hunting permits decreasing by around 25% from 2020 to 2024 (Figure 2) • Number of Magpie Geese permitted for pest removal remaining between 3000 and 4000 birds/year from 2020-2024 (Figure 6).
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Objective 2: To promote sound management of important areas of habitat to address impacts of current and future threats including climate change

Outcomes	Actions	Performance Measures	Action Officer	Partners	Timeline	Achievement 2025	Comments 2025 Review
Spatial representation of high-quality occupancy and nesting habitat available to management agencies and research community	<p>Maintain maximum occupancy and nesting habitat models</p> <p>Ensure data are readily available</p>	<p>Models with True Skill Statistic of >0.7, ROC > 0.8</p> <p>Data uploaded annually to NR Maps website</p> <p>Responsive to specific data requests</p>	DLPE	N/A	Annual and as required model updates and publication of spatial layers	Met	<p>Revise actions/performance measures to reflect actual species distribution (based on aerial survey data).</p> <p>Inclusion of Magpie Goose and nesting occurrence maps from 2025 survey report onwards.</p> <p>Magpie Goose presence data are available from each annual survey in NR Maps.</p>

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Ramsar, Park Management Plans and Regional NRM strategies cognisant of Magpie Goose habitat, threats and management requirements	Desktop review of existing management plans/strategies	Explicit treatment of wetland habitat for maintenance and improvement of key breeding and feeding areas	DLPE	DTH, Parks Australia, Territory NRM	Ongoing	Partially met	<p>The importance of managing Magpie Goose habitat is recognised by formal management plans for parks/reserves but it is less clear for habitats on other land tenures, particularly pastoral lands.</p> <p>The effectiveness of land management plan implementation is challenging to assess and more focus on regular engagement with land managers (particularly pastoral lands) is required to assess and promote actions.</p> <p>Figure 3 to Figure 5 summarise weed and feral animal management activities undertaken by various land managers who responded to a request to provide details of activities from 2020-2025</p>
Landholders supportive of good management of wetland habitats including pest and weed management	Best practice water, weed and pest management information accessible to landholders	Area of habitat treated for pest and weeds relative to area impacted	DLPE	Includes DTH, TNRM	Ongoing	Partially met	Where possible, there needs to be a greater focus on regular engagement with land managers to enable more comprehensive assessment of areas treated vs impacted.
Hunting reserves managed to promote Magpie Goose habitat	Pest and Weed control	Area of habitat treated for pest and weeds relative to area impacted	TBD DTH	Hunting Groups, DTH, DLPE	Ongoing	Met	Management of weeds and ferals is regularly undertaken on hunting reserves.
Objective 3: To ensure and support the sustainable use of Magpie Goose populations							
Outcomes	Actions	Performance Measures	Action Officer	Partners	Timeline	Achievement 2025	Comments 2025 Review
Offtakes from all sources kept within sustainable limits	Population survey	Population estimate of ≤ 20% precision for	DLPE	DTH, Parks Australia	Annual (April to May)	Met	Note: a lower precision percentage represents a better population estimate.

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		numbers and nests					<p>Annual surveys have been completed, with acceptable levels of precision (i.e. $\leq 20\%$) achieved in all years from 2020 to 2025, with the exception of:</p> <ul style="list-style-type: none"> • Geese abundance in 2021 (28.9%) • Geese nests in 2022 (28.6%).
	Setting annual offtake in consideration of population levels and in accordance with current Government policy	<p>Total annual offtake 8.4% of population estimate</p> <p>Annual assessment of proportion of population likely to be taken via bag limit</p>	DLPE	Hunting reference group	Annual (June)	Met	<p>Annual bag limits were set according to population levels from 2020-2024.</p> <p>Current government policy is to fix bag limit from 2025-2029, irrespective of population level. However, Government has acknowledged that an unforeseen catastrophic event (e.g. failure of a wet season; HPAI impacts) could trigger a review.</p>
	Monitor long term trends in numbers and offtake	<p>Population maintained above 4m</p> <p>Frequency of permit returns</p>	DLPE	DTH, Parks Australia	Annual	Not met	Hunting return rate very low (<1% in 2024-25). Requires substantial improvement.
Equitable access to resource	Parameters established in this program	Sustainable harvests and community support	DLPE	Hunting reference group	Established here, reviewed within 5 years	Met	Survey data indicates that harvest has been sustainable (despite lack of hunting returns data) and community support appears to be consistently positive.
Hunting opportunities maintained or increased	Investigate opportunities for new hunting areas	<p>Bag limits of 5 to 7 achieved in future years. New hunting areas identified and opened</p> <p>identified and opened</p>	TBD DTH	Hunting reference group	Annual Hunting season set in Early July Ongoing	Partially met	<p>Additional access in southern section of Harrison Dam Hunting Reserve was completed in 2024.</p> <p>DTH formed Hunting Reference Group in October 2025, to identify and pursue potential opportunities for additional hunting areas.</p>

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Viable commercial industry	Assessment of future demand for resource	Industry growth to \$1 m + within 5 years	DLPE	DTH, DBTI, Commercial stakeholders	Annual update of 5 year projections	Partially Met	Interest in commercial opportunities has been low, with only one current permit holder for 1000 geese/year.
Traditional hunting opportunities maintained or increased	Promote habitat management practices to protect significant feeding and breeding areas on Aboriginal land	TBD Annual consultation with Aboriginal ranger groups who manage key Magpie Goose habitats Seek funding opportunities to assist Aboriginal ranger groups with managing key Magpie Goose habitats	DLPE /NLC	TNRM, DTH		Met	The former Aboriginal Ranger Grants Program contributed significantly to goose habitat management. DLPE undertakes regular consultation and collaboration with Ranger groups to promote habitat management. Proposed performance measures have been added.
Social licence for sustainable use maintained	Demonstration of scientific basis of management. Promotion of ethical hunting including consideration of animal welfare requirements. Assess livelihood and economic benefits of commercial industry to Territorians	TBD Maintain and update information on ethical hunting practices, via websites, social media and ongoing consultation with hunting stakeholders Where resources are available, undertake economic analysis of	DLPE	DTH	Ongoing	Partially Met	Economic analysis of benefits of commercial industry has not been undertaken, due to lack of interest in commercial opportunities. Positive reporting of waterfowl hunting season in the media each year indicates that social licence for recreational hunting is high. No evidence of concerns by wider community. Proposed performance measures have been added.

		contribution of hunting industry to NT economy					
Objective 4: To minimise the economic loss by commercial fruit growers from goose impacts without adversely impacting the conservation of the species							
Outcomes	Actions	Performance Measures	Action Officer	Partners	Timeline	Achievement 2025	Comments 2025 Review
Reduction in conflict between Magpie Geese and Horticulturalists	Promulgation of best practice information to minimise adverse impacts of Magpie Geese	Reduction in destructive pest mitigation permits and in damage by Magpie Geese. Commercial and/or recreational take improving mitigation	DTH /DAF	CDU, Horticulture Australia, DLPE	Ongoing	Partially Met	<p>The number of pest mitigation permits and numbers of geese permitted for take have remained static (Figure 6). DTH (Parks and Wildlife) undertakes visits to properties for any new permit applications, to discuss alternatives to shooting and encourage keeping the numbers of birds taken to as low as practicable.</p> <p>Ongoing arrangements for recreational hunters to assist with pest mitigation, although numbers of geese taken is largely unknown (refer to comments on Objective 3 re: poor rates of hunting returns).</p> <p>Need to focus more on stakeholder engagement, with at least annual consultation on issues and available opportunities for improved pest mitigation methods.</p>

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Improve efficiencies of mitigation efforts	Integrated pest management strategy for horticulturalists	Adoption of site specific management approaches	DAF	DTH, CDU, Horticulture Australia, DLPE	TBD Ongoing	Partially Met	Integrated Pest Management Strategy was published by CDU in 2019, although the degree of uptake is unclear.	
New mitigation measures	Investigate cost benefit analysis of netting and other non-destructive mitigation measures	Cost effective and practical solutions	TBD All relevant Agriculture Industry Stakeholders	DTH, CDU, Horticulture Australia. DLPE	TBD Ongoing	Partially Met	<p>Consultation with Department of Agriculture and Fisheries, NT Farmers and other relevant industry groups (e.g. Mango Growers Association) indicates that pest issues are variable between crop types and from year to year but don't appear to have increased over recent years.</p> <p>Some recent trials of emerging technologies (e.g. laser scaring devices) have been successful, although applicability is likely to vary between crops (more likely applicable to low/ground crops vs tree crops).</p>	
Objective 5: To provide ongoing refinement of Magpie Goose management through timely evaluation of management prescriptions and performance with opportunities for stakeholder input								
Outcomes	Actions	Performance Measures	Action Officer	Partners	Timeline	Achievement 2025	Comments 2025 Review	
Continued or improved stakeholder support	Annual assessment of relevant performance measure	% of performance measures met	DLPE		Annual	Met	Annual reviews have been undertaken	
	Program Review against all outcomes and performance measures	Achievement of objectives and outcomes	DLPE		In 5 years	Met	Currently being undertaken (i.e. this report)	
Best practice management program	Program Revision based on 5.2	Revised program as required	DLPE		In 5 years (if required)	Met		