



Conservator of Flora and Fauna
Environment, Planning and
Sustainable Development Directorate

Dear Dr Lane

Thank you for the opportunity to provide a submission in response to the *Draft Migratory Species Action Plan 2017*.

The *Draft Migratory Species Action Plan 2017* (the Draft Plan) is an important document that guides the conservation and management of habitats in the ACT, which are suitable for the listed migratory species that regularly visit or breed in the ACT. On an international scale, the Draft Plan contributes to the delivery of the United Nation's Sustainable Development Goal 15:

*“Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”.*¹

The Draft Plan is significant as action taken in the ACT has the opportunity to aid the survival of migratory species locally, nationally and internationally. This can be achieved by supporting species that use land in the ACT for breeding and as staging

grounds during migration. I commend the effort that has been put into creating a thorough and detailed Draft Plan. The ACT is showing real leadership on this issue as it is one of the first jurisdictions to plan for the conservation of migratory species in Australia. My submission addresses four key points, in order of prioritisation, which can enhance the final Migratory Species Action Plan.



Figure 1: Rufous Fantail, Source: Wikimedia Commons

¹ United Nations 2015, *Resolution adopted by the General Assembly on 25 September 2015 – Transforming our world: the 2030 Agenda for Sustainable Development*, Seventieth session, Agenda items 15 and 16.



The Threat of Climate Change

“By the end of the century, climate change and its impacts may be the dominant direct driver of biodiversity loss and changes in ecosystem services globally.”²

Research from Janice Wormworth and Cagan H. Sekercioglu discusses the paradox of migratory species as they are both mobile but vulnerable to the impacts of climate change. Migratory species are highly mobile, however depend on multiple habitats to survive, and change to crucial sites has the ability to adversely affect entire populations. If climate-induced changes lead to impacts on breeding, overwintering and stopover habitats, the total effect on populations could be catastrophic.³

“The ability of the birds to show us the consequences of our own actions is among their most important and least appreciated attributes. Despite the free advice of the birds, we do not pay attention.”⁴

‘Loss of habitat caused by anthropogenic emissions of greenhouse gases’ has been declared a Key Threatening Process under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This reflects the influence of climate change on habitat loss and should be noted in the Draft Plan. Furthermore, climate change has been identified as a major threat to migratory species in the [Wildlife Conservation Plan for Migratory Shorebirds](#)⁵ highlighting the importance that climate change threats are adequately addressed within the Draft Plan.

Climate change has been listed as a threat to migratory species within the Draft Plan, however, the impacts that migratory species will face under climate change are not outlined. Furthermore, the threats from climate change are not addressed within Goal 2: ‘Manage identified threats to important sites and habitat’.

Projected changes in the ACT from climate change as outlined in the ACT Climate Change Adaptation Strategy⁶ are:

- temperature: increase in maximum and minimum temperatures

² Millennium Ecosystem Assessment, 2005 in: Janice Wormworth and Cagan H Sekercioglu, 2011, *Winged Sentinels Birds and Climate Change*, Cambridge University Press, New York.

³ Janice Wormworth and Cagan H Sekercioglu, 2011, *Winged Sentinels Birds and Climate Change*, Cambridge University Press, New York.

⁴ Marjory Stoneman Douglas, 1947 in: Janice Wormworth and Cagan H Sekercioglu, 2011, *Winged Sentinels Birds and Climate Change*, Cambridge University Press, New York.

⁵ Australian Government Department of the Environment, 2015, *Wildlife Conservation Plan for Migratory Shorebirds*, <http://www.environment.gov.au/system/files/resources/9995c620-45c9-4574-af8e-a7cfb9571deb/files/wildlife-conservation-plan-migratory-shorebirds.pdf> accessed on 9 September 2017.

⁶ ACT Government, 2016, *ACT Climate Change Adaptation Strategy Living with a Warming Climate*, Australian Capital Territory.

- hot days and heatwaves: increase
- cold nights: decrease
- rainfall: decrease in spring, increase in summer and autumn
- average fire weather: increase in spring, summer and winter
- severe fire weather days: increase in summer and spring.

“Migratory species have, and will continue to be, adversely affected by Climate Change – over 80% of CMS [Convention on Migratory Species] listed bird species face some threat from it, almost half because of changes in water regimes.”⁷

Although migratory species will be mostly affected by changes in climate on the coast, local climate change induced impacts will also be felt by migratory species. As such, a key focus in the ACT should be to address climate change impacts on habitat loss and degradation. Broadly speaking the expected threats for migratory species from climate change⁸ include:

- shifts in breeding patterns: for example influence on birds’ reproductive period as climate change affects their arrival at breeding grounds and their length of stay
- food resources: for example on the timing of food supplies during the birds’ annual cycle
- rainfall influences on food resources: for example rainfall declines may reduce food availability resulting in delayed departure times, however, rainfall increases may enhance food supplies and allow birds to arrive earlier in their breeding grounds
- birds’ range and distribution: if birds’ ranges face habitat edges where they are not well adapted for survival this could block their escape from climate change, furthermore a decline in range size may lead to smaller populations and elevate extinction risk
- stopover and refuelling sites: pose a barrier if food resources are limited at refuelling sites as the ability to take on adequate fuel is vital for a bird’s journey
- indirect impacts from weather: more favourable weather in spring may advance plant and insect development in birds’ passages and breeding grounds
- impacts on inland wetland ecosystems: for example changes in the hydrological cycle may cause wetlands to flood, threatening nesting birds and damaging vegetation. If wetlands dry out the birds’ food supplies are limited and the water barriers that protect them from predators may be lost.

“...letting natural processes operate unfettered may result in species or whole associations running into the ecological equivalent of a brick wall, as natural

⁷ Desk study into the effects of Climate Change on migratory species available in: United Nations Environment Programme, 2006, Migratory species and climate change Impacts of a Changing Environment on Wild Animals, http://www.cms.int/sites/default/files/document/ScC14_Inf_09_Migratory_Species%26Climate_Change_E_0.pdf accessed on 23 August 2017.

⁸ Janice Wormworth and Cagan H Sekercioglu, 2011, *Winged Sentinels Birds and Climate Change*, Cambridge University Press, New York.

processes take the system toward range shifts and re-association, while habitat loss prevents migration or replacement of species.”⁹

Recommendation 1 – Threats from climate change, particularly on habitat loss, need to be addressed in further detail within the ‘Threats to Migratory Species’ section of the Draft Plan. Secondly, these threats also need to be addressed within Goal 2 ‘Manage identified threats to important sites and habitats’.

Monitoring and Review – Objectives, Actions and Performance Indicators

Monitoring and review is a critical part of implementing this Action Plan – how is this proposed to be achieved? It is vital as it enhances accountability and transparency, and provides input into adaptive management strategies. Furthermore, monitoring and review within the Migratory Species Action Plan sets a standard for implementation.

In the Draft Plan there is no reference to who is responsible for undertaking each action or the timeframes applicable. For example “*increase in number and area of urban wetlands*”¹⁰ – what is the scope for this; how does this align with other government activities; who is responsible; and who will provide funding. As such, the Draft Plan lacks the level of accountability required for effective management for migratory species in the ACT, including incorporation into Reserve Operational Plans. It is not clear how and when the actions will be undertaken, nor how each individual action is going to be addressed and attained beyond the strategic statements outlined.

The Draft Plan outlines a range of management actions broken down into key objectives, actions and performance measures under each of the four goals. These actions provide a high level strategic approach; in the Implementation Plan that will be prepared, I anticipate that specific projects, timeframes and responsible agencies will be included that address each goal.

The Commonwealth Government [Wildlife Conservation Plan for Migratory Shorebirds](#)¹¹ provides a good example of how actions identified for the protection, conservation and management of species can be outlined within a conservation plan. Prior to addressing actions, threat prioritisation analyses the associated risks of each threat. This feeds into prioritised actions to achieve specific objectives. Furthermore, actions are delegated to responsible agencies and potential partnerships, for example relevant NGOs.

⁹ Lee Hannah et al., 2015 in: Janice Wormworth and Cagan H Sekercioglu, 2011, *Winged Sentinels Birds and Climate Change*, Cambridge University Press, New York.

¹⁰ ACT Government, 2017, *Draft Migratory Species Action Plan 2017*, Table 4 Key objectives, actions and indicators – shorebirds.

¹¹ Australian Government Department of the Environment, 2015, *Wildlife Conservation Plan for Migratory Shorebirds*, <http://www.environment.gov.au/system/files/resources/9995c620-45c9-4574-af8e-a7cfb9571deb/files/wildlife-conservation-plan-migratory-shorebirds.pdf> accessed on 9 September 2017.

Recommendation 2 – Address the role of monitoring and review in the Migratory Species Action Plan. For the Implementation Plan, and the association of actions with specific projects, the responsible implementation agencies and timeframes need to be prescribed.

Prioritisation for Management



Figure 2: Latham's Snipe, Source: Wikimedia Commons

We note that for migratory species the focus for management should be on those that breed in the ACT producing viable populations. However we understand that flycatchers which breed in the ACT are proposed to be delisted by the Commonwealth for taxonomy reasons.

The current focus of management in the Draft Plan on Latham's Snipe provides co-benefits for other species that utilise the same locations.

Recommendation 3 – Focus for management should be on location priorities rather than species prioritisation, due to limited sites in urban areas across the ACT and the highly variable occurrence in the ACT between different species.

Policy Context

The Draft Plan identifies that it “*informs environment impact assessment and land use planning processes under the ACT's Planning and Development Act 2007*”.¹² To add clarity, it is necessary to state that listed migratory species are a trigger for consideration under both the *EPBC Act* and the *Nature Conservation Act 2014*.

Recommendation 4 – Clarify the policy and legal context of the Draft Plan, detailed above.

My team met with the Canberra Ornithologists Group (COG) which will be providing a detailed submission on the Draft Plan and is a key stakeholder for this work. We acknowledge the essential monitoring that COGs undertakes.

My office is happy to be contacted for further clarification if required.

Yours sincerely

A handwritten signature in blue ink that reads 'Kate Auty'.

Professor Kate Auty (Professorial Fellow, University of Melbourne)
Commissioner for Sustainability and the Environment

24 August 2017

¹² ACT Government, 2017, *Draft Migratory Species Action Plan 2017*, page 3.