Orange-bellied Parrot (OBP) Recovery Program News, September 2021

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This winter, we have some intriguing news on wild OBPs from an unlikely location, given the season: Tasmania. Wildcare Friends of the OBP (FoOBP), a community group and an OBP Recovery Team member, searched the northwest coast of Tasmania from Temma to Marrawah from the 25th to the 27th of July. They found two OBPs north of Arthur River. What were they doing there? We can only wonder at this stage. It is possible that these OBPs did not migrate across Bass Strait and had found enough to eat on the northwest coast; or perhaps they did complete a full migration and were on their back to Melaleuca, albeit a tad early. This was the first time in recent years that north-west Tasmania was surveyed for OBPs, but FoOBP plan to make the survey an annual event in the region. In future years, migration and winter surveys in Tasmania will build our knowledge of OBP occurrence in Tasmania during the non-breeding season.

It has been another tough year for our mainland volunteer surveyors, as COVID-19 restrictions have stopped the OBP Winter Survey thrice in Victoria and once in South Australia. The volunteers that assist the Mainland Release trial have been impacted as well. The OBP Recovery Team acknowledges the frustration and disappointment that many of our volunteers from the mainland have felt in the last two years due to the impacts of the COVID-19 pandemic. We ask our mainland volunteer surveyors to hang in there as their work provides important insight for the recovery program. We look forward to welcoming their participation again when it is safe to do so.

The Mainland Release Trial is in its fifth year with additional support from the Corangamite Catchment Management Authority, funded by the Australian Government's National Landcare Program, along with funding from the Victorian Government, Zoos Victoria, and Moonlit Sanctuary. Thirty-six captive-bred OBPs were released in April at three sites: the Spit Nature Conservation Reserve; near the North Western Port Bay Conservation Reserve; and near Lake Connewarre (a new site). There have been flocks of OBPs in all three sites, consisting of individuals released this year, released last year and, most excitingly, individuals that have migrated from Melaleuca this year. A group of 10 OBPs was seen at "The Spit" and a group of nine at Lake Connewarre. Altogether, 10 natural migrants have been observed associating with released birds across the three sites. Again, the project team progressed with trials to develop recall training and satellite tracking techniques for this species. Most released OBPs were fitted with radio transmitters and, in addition to the team's usual tracking with hand-held receivers, several fixed receiver stations were used for the first time.

Our representatives from the University of Sydney and Zoos Victoria, among other authors, published an analysis of the potential for interspecific genetic rescue as a tool to conserve OBPs (Hogg et al. 2021). Genetic rescue can reduce the risk of extinction in small and isolated populations by introducing new genetic variation, typically from other populations of the same species, but as OBPs have a single population, interspecific genetic rescue is required to enhance genetic diversity. The authors' phylogenetic analysis of all *Neophema* and *Neopsephotus* species found strong support for OBPs being a

sister species to a group comprising of Elegant, Rock, and Blue-winged Parrots. And their analysis of distribution, ecology, and behaviour among the species above suggests that the Blue-winged Parrot is likely the most suitable species to trial interspecific hybridisation in captivity. The OBPRT is considering the case for such trials, taking into account various factors including community perceptions and legal framework relating to the strategy.

Preparation for captive breeding, including the transfer of individuals among institutions to optimise genetic diversity in the next generation, has begun at Adelaide Zoo, DPIPWE Five Mile Beach, Healesville Sanctuary, Moonlit Sanctuary, and Priam Psittaculture Centre. The 2021-22 breeding season will see the recommencement of transfers of breeding birds among institutions (not done last year due to COVID-19 impacts) to assist in the pairing of OBPs to maintain good genetic diversity in the captive population). OBPRT members are preparing for a Spring Release (spring 2021) and Juvenile Release (late summer 2022) at Melaleuca, and possible Mainland Release (autumn 2022). Volunteering at Melaleuca will again occur following COVID-19 protocols and site plans.

As for the OBPs, their southern migration has begun. In the past week, a small group have been observed foraging voraciously in Victoria and the first individual has returned to Melaleuca for the upcoming breeding season.

Fast Facts:

- OBPs (*Neophema chrysogaster*) are small ground-feeding parrots. Males are bright green, yellow and blue with a prominent orange belly. Females and juveniles are duller with less prominent orange bellies. OBPs breed in south-western Tasmania within 5 km of the coast. They migrate via western Tasmania, the Hunter Island Group and King Island in autumn and spring, and winter on the south-eastern coast of Australia. Each year, OBPs fly at least 640 km across land and sea.
- OBPs are classified as Critically Endangered on the IUCN's Red List and under the Commonwealth's EPBC Act 1999 because of their extremely small wild population, single breeding location and recent rapid decline. There is some uncertainty about the cause of the species' decline; however, habitat loss and degradation, as well as introduced predators and competitors, have likely been responsible historically, and, presently, OBPs face numerous interacting threats, including the genetic, health and social impacts of a very small wild population.
- The OBP Recovery Team comprises 30 members representing government and non-government organisations as well as community groups and individuals. The role of the Team is to coordinate recovery activities, provide advice to conservation managers, and review the progress of Recovery Plan implementation to maximise the effectiveness of the recovery program.
- Volunteers contribute significantly to the actions of the OBP Recovery Program, includingcollecting data on the species in the breeding and non-breeding ranges, assisting in the care of the OBP captive population, contributing to public awareness and raising funds for recovery actions.
- The actions of the OBP Recovery Team are funded by the organisations within the partnership as well as through government and non-government grants, fundraising activities, and individual and corporate donations.