

# CONSERVATION ACTION PLAN SUMMARY FOR THE BLACK-THROATED FINCH SOUTHERN SUBSPECIES

2020-2021



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## ACKNOWLEDGEMENTS

Black-throated Finch conservation efforts continue to be supported by members of the Black-throated Finch Recovery Team (BTFRT) and dedicated volunteers. The BTFRT would like to extend thanks to all past and future stakeholders and volunteers who dedicate time and energy to support on-going recovery efforts.

Images: Tony Grice, Eric Vanderduys, Jaymie Rains, Stephanie Todd

### CITE AS

BTFRT (2020). Conservation Action Plan Summary for the Black-throated Finch Southern Subspecies. December 2020 (Updated April 2021)



# 1. EXECUTIVE SUMMARY

This Conservation Action Plan summary was developed through a review of existing plans and a collaborative planning workshop with members of the Black-throated Finch Recovery Team (BTFRT) and key stakeholders in September 2020.

The aim of the planning process was to review the conservation status of the Black-throated Finch southern subspecies, *Poephila cincta cincta*, (BTFS), and identify practical intervention strategies to help improve and restore BTFS populations and their habitat.

Seven key strategies were identified:

1. Secure areas of high-quality habitat for conservation.
2. Inform State and Federal environmental legislation to better protect BTFS and their habitat.
3. Demonstrate stability or improvement in BTFS (population) at key sites.

4. Implement a national recovery program which encourages stakeholder collaboration and coordination, and a high level of community participation.
5. Guide the implementation of fit-for-purpose land management (grazing, invasive species, fire) at key off-reserve sites within the BTFS range.
6. Improve community value, awareness and understanding of BTFS.
7. Support research incentives that inform on-ground conservation actions.

Collectively, these strategies will support;

- reducing further loss and fragmentation of BTFS habitat; and
- securing and managing existing BTFS populations for long-term viability.

**The Black-throated Finch Recovery Team's vision is a future in which BTFS thrive and live in harmony with a community who value their conservation.**





## 2. INTRODUCTION

The southern subspecies of Black-throated Finch (*Peophila cincta cincta*), (BTFS), presumed extinct in New South Wales, has suffered significant range contractions and is now confined to Queensland.

Using reliable BTFS records from 1990 – 2000 and comparing the extent of occurrence (EOO) of those to the EOO of records 2000 – 2020, the BTFS has lost approximately 50 per cent of its EOO. It is more difficult to estimate declines from its historic range because of inaccuracy of many earlier records. However, the likely loss of EOO from pre-european to contemporary timeframes is approximately 90 per cent.

This Conservation Action Plan (CAP) summary is not designed to replace the Recovery Plan for

the Black-throated Finch southern subspecies, nor duplicate activities currently undertaken by the BTFRT. The CAP aims to help foster collaborative and coordinated on-ground conservation action while adopting an adaptive management framework. The CAP complements the BTFRT's Work Plan (Miradi), designed to help efficiently implement project strategies and monitoring activities.

The BTFRT, with its diverse set of skills and expertise, will lead the delivery of the CAP and tackle some of the broader landscape actions that are necessary to conserve the BTFS. These actions would be impossible for any single group, organisation or individual to address.





### 3. CAP CONTEXT

#### A) THE PROCESS

The planning process for the BTFS CAP uses the Open Standards for the Practice of Conservation, now commonly known as the Conservation Standards. These Conservation Standards, developed by the Conservation Measures Partnership (CMP), helps conservation teams systematically plan, implement, and monitor their conservation initiatives in an adaptive management framework. This CAP also incorporates The Nature Conservancy's (TNC) version of the Open Standards known as the Conservation Action Planning (CAP) framework, which has become widely adopted in Australia for landscape-scale conservation projects.

Members from the Black-throated Finch Recovery Team (BTFRT) commenced a first iteration CAP in 2016. This process was revisited in September 2020 following a recommendation by an independent review of the BTFRT by Birdlife Australia.

#### B) THE SCOPE

This CAP focuses on improving the ecological health of the asset — the Black-throated Finch southern subspecies — and its habitat. The scope of the Plan is the extent of occurrence (EOO) of BTFS.

The EOO (Figure 1, pg 6) generally encompasses the central and northern Desert Uplands, southern Einasleigh Uplands, southern Wet Tropics and northern Brigalow Belt bioregions.

Please refer to the Recovery Plan for a detailed description of BTFS habitat.

#### C) BTFS VIABILITY (2020 SNAPSHOT)

The viability of BTFS was considered in terms of indicators derived from available information sources, including analyses compiled for the Action Plan for Australia's Birds (Buosi PA, Vanderduys EP, Grice AC, Reside AE, 2020).

Table 1 identifies four indicators that the BTFRT will use to refine its understanding of BTFS over time. As new information regarding BTFS viability becomes available through addressing

knowledge gaps and new research, the BTFRT will update all relevant indicator ratings.

Importantly, much work needs to be completed to refine current measures and future targets of BTFS viability.

Table 1: Indicators for BTFS health, including experts' opinions of the 2020 status. The status applies at the total population and individual subpopulation level.

INDICATORS	STATUS
Population size	Poor and decreasing
Extent of Occurrence (EOO)	
Area of Occupancy (AOO)	
Degree of habitat fragmentation	

#### D) BTFS THREATS (2020 SNAPSHOT)

Threats to BTFS (Table 2), based on those identified in the literature and by workshop participants, were ranked for their extent, severity and irreversibility using Miradi software (v4.5.0). IUCN Level 1 and Level 2 threats have been adopted for International consistency.

Agriculture and aquaculture (IUCN Level 1) from a broad-scale grazing perspective (IUCN Level 2), is considered the greatest threat to BTFS, with most of the remaining habitat coinciding with grazing land. For BTFS populations on the Townsville Plains, the expanding residential and urban footprint continues to remove and fragment the remaining BTFS habitat. This loss is compounded by ecosystem modifications associated with weed invasions, water use management and unsuitable fire regimes.



Figure 1: Historical and contemporary BTFS extent of occurrence (EOO) as modelled from reliable BTFS records from 1990 – 2020.

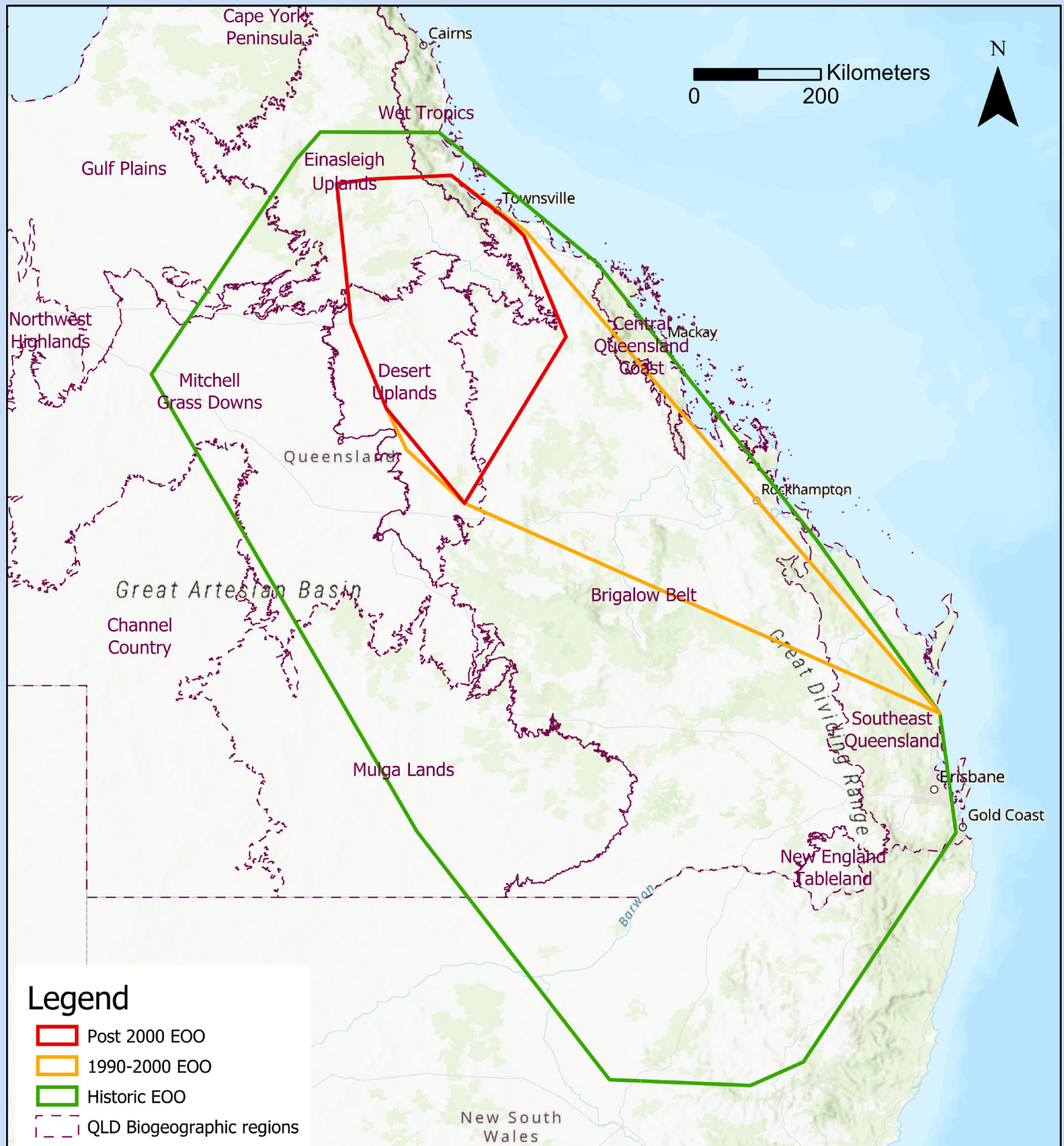




Table 2: BTFS ‘threat snapshot’ 2020 (IUCN Level 1), based on available literature and input from workshop participants.

RANKING	THREAT
Very High	Agriculture and aquaculture
	Residential and commercial development
	Energy production and mining
	Natural systems modifications
	Invasive and other problematic species, genes and diseases
High	Climate change and severe weather *
Medium	Transportation and service corridors
Low	Biological resource use *

\* low confidence due to insufficient data on direct threats to BTFS.





## 4. SITUATION ANALYSIS

Workshop participants contextualised the human behaviours and factors contributing to BTFS threats. The drivers below are considered in terms of identified Level 2 IUCN threats.

### DEVELOPMENT DRIVERS

- **Housing and urban areas, and commercial and industrial areas** — Growing human populations are increasing the demand for housing, lifestyle and commercial infrastructure, resulting in expanding urban footprints and the subsequent loss of BTFS habitat. This is particularly prominent on the northern coast of the Brigalow Belt, in the vicinity of Townsville (Figure 1, pg 6).
- **Roads and railroads, and utility and service lines** — Community demand for service infrastructure (roads, electricity, water, telecommunications) removes and fragments BTFS habitat and provides a conduit for the spread of pest plants and animals.
- **Mining and quarrying, and renewable energy** — BTFS habitat is threatened by national and international resource demand and a systematic desire for economic growth through the mining resource sector. In particular, BTFS populations in the Desert Uplands bioregion are threatened by habitat loss for large-scale coal mining exploration and extraction activities. Exploration activities



can degrade BTFS habitat beyond the immediate mining footprint through activities such as the dewatering of aquifers, which change the distribution of groundwater in the environment. Similarly to mining resource demands, there is also a demand for renewable energy sources such as solar farms which require cleared habitat for operation. The threat of renewable energy is presently at a mostly local scale, but is expected to increase with future demands.

### AGRICULTURE DRIVERS

- **Livestock farming** — Livestock farming, mainly in the form of large-scale cattle grazing, is implemented under various agribusiness models to achieve profits for graziers and meet demands for meat products. Graziers apply varying methods of land management practices that alter ecological function (e.g. sowing of, fodder species) and decrease the resource base for BTFS. The loss or degradation of BTFS habitat often comes as a result of agribusiness decision making and is prevalent across the remaining distribution of BTFS.
- **Annual and perennial non-timber crops** — Similar to livestock farming, but to a lesser extent, the propagation of non-timber crops to meet local, regional, national and international demands; and to support people's livelihoods; results in the loss of BTFS habitat. Within the BTFS distribution, sugarcane, tree and horticultural crops are prevalent in coastal Brigalow Belt areas, while horticultural and grain crops dominate inland Brigalow Belt areas. (Figure 1, pg 6).

### INVASIVE SPECIES DRIVERS

The threat to BTFS from introduced flora and fauna species is driven by a large number of invasive species with many origins, such as pasture improvement plants, garden escapees and species of uncertain provenance, e.g. Chinese apple (*Ziziphus mauritiana*) which was introduced in 1863 as a fruit source. Invasive flora threats tend to be greatest in peri-urban



areas where high levels of disturbance promote colonisation.

Invasive fauna species that impact BTFS include predators, e.g. cats, foxes, and feral unmanaged herbivores such as cattle, horses and deer, and omnivores such as pigs. The level of threat posed by introduced predators is unknown. For unmanaged herbivores and omnivores the effects are also unknown but are assumed to be similar to the effects from managed populations of these (refer to Agricultural Drivers).

## NATURAL SYSTEMS MODIFICATIONS

The timing, frequency and intensity of fires influences BTFS habitat condition and extent. Land management actions such as ecosystem manipulation (e.g. selective vegetation thinning)

can also adversely affect BTFS habitat. Water use in particular, changes the natural distribution of water in a landscape (e.g. more dams) and can encourage additional livestock grazing which further reduces the

## CLIMATE DRIVERS

Human-induced climate change is driven by an increasing human population and resource demand that can create unfavourable weather conditions and patterns (*habitat shifting and alteration, droughts, temperature extremes, storms and flooding*) for BTFS and their habitat.



## 5. STRATEGIC INTERVENTION

Following further discussion and refinement, seven strategies were identified for the CAP. Table 3 (pg 10) briefly outlines each strategy. Strategies are categorised as target restoration (TR), behaviour change (BC) or enabling condition (EC), or a combination of these categories (WildTeam, 2018).

TR strategies involve actions and activities that directly alter the status of biodiversity targets (e.g. removal of invasive species),

BC strategies involve actions and activities that directly change human behaviour or contribution

factors (e.g. providing alternate solutions to land management approaches), and EC strategies involve actions and activities that either help a team implement TR and/or BC actions/activities, or indirectly enable a target group (e.g. private land managers) to change their behaviour (e.g. providing funds for invasive species management).

For further information regarding actions, activities, stakeholder roles and responsibilities, and budget requirements, refer to the Recovery Plan or contact the BTFRT to discuss the details of the work plan.

Table 3: Summary of the strategies identified to improve and restore the long-term viability of BTFS.

STRATEGY	THIS STRATEGY IS ABOUT...
1. Secure areas of high-quality habitat for conservation (BC / EC / TR)	Establishing protected areas that are managed for BTFS persistence.
2. Inform State and Federal environmental legislation to better protect BTFS and their habitat (BC / EC)	Preventing habitat loss by ensuring adequate, long-term legal protection of BTF habitat
3. Demonstrate stability or improvement in BTFS population viability at key sites (EC)	Refining the techniques required to sufficiently monitor BTFS populations, and establishing a network of monitoring sites across the species' distribution. BTFS monitoring will be a shared responsibility by all stakeholders and the community.
4. Implement a national recovery program which encourages stakeholder collaboration and coordination, and a high-level of community participation (EC / BC)	Implementing the actions of the Recovery Plan and the Conservation Action Plan, ensuring shared responsibility by all stakeholders and actively engaging the general community to participate in recovery actions.
5. Guide the implementation of fit-for-purpose land management (grazing, invasive species, fire) at key off-reserve sites within the BTFS range (TR / BC / EC)	Working with the community to develop, implement and monitor fit-for-purpose land management actions that address the triple bottom line (people, planet and profit).
6. Improve community value, awareness and understanding of BTFS (EC)	Educating the community to raise awareness of BTFS and the environment to improve community understanding and value of the natural environment.
7. Support research incentives that inform on-ground conservation actions (EC)	Ensuring continual improvement of conservation action by supporting research that addresses priority information or knowledge gaps.

## NEXT STEPS: IMPLEMENTATION AND EVALUATION

The BTFRT has started implementing strategies and actions in line with this CAP and the Recovery Plan. Implementation is underpinned by monitoring and evaluation activities to ensure continual progress and adaptive management.

## WANT MORE INFORMATION?

For more information or to find out how you can help the Black-throated Finch Recovery Team with its efforts, please visit the Black-throated Finch website: [www.blackthroatedfinch.com](http://www.blackthroatedfinch.com)



## 6. REFERENCES

Buosi PA, Vanderduys EP, Grice AC, Reside AE (2020) Southern Black-throated Finch *Poephila cincta cincta*. In Action Plan for Australian Birds 2020. (Ed. ST Garnett) CSIRO, Melbourne.

WildTeam (2018) Strategy Development for Wildlife Conservation v1. Wildlife Conservation Best Practice Series. WildTeam, Cornwall, UK.

BTFRT (2021). National Recovery Plan for the Southern Black-throated Finch *Poephila cincta cincta*.

## 7. APPENDIX

A) Stakeholders attending the September 2020 Conservation Action Planning workshop.

ORGANISATION	REPRESENTATIVE
Birdlife Australia	Janelle Thomas and Stephanie Todd
Birdlife Townsville	Janet Cross
Black-throated Finch Recovery Team (Chair)	Tony Grice
CSIRO	Eric Vanderduys
Department of Environment and Science	John Hodgson
NQ Dry Tropics	Brett King, Jaymie Rains and Rachael Payne
NRA Environmental Consultants	Peter Buosi
University of Queensland	April Reside
Townsville City Council	Alma Ridep-Morris

\* Apologies: Gary Fitt (CSIRO)



