# MANAGEMENT GUIDELINES HOW TO LOOK AFTER THE BLACK-THROATED FINCH

#### WHAT DOES IT LOOK LIKE?

The southern subspecies of the Black-Throated Finch (*Poephila cincta cincta*) is an endangered bird that is now restricted to Queensland and, even there, is found across only a fraction of its former range. Managing its habitat is crucial to its conservation and recovery.

A Black-throated Finch is conspicuous by the neat black bib on its throat. It is a small (10cm long), stocky bird with a grey head and thick, black beak. Its body is shades of cinnamon brown.

There are two subspecies of the Finch; the northern and southern. The northern subspecies has a black rump and the southern subspecies has a white rump. There are a number of small native and introduced grass finches of a similar size. Some of them can be confused with the Black-throated Finch.

#### WHERE DO THEY LIVE?

These guidelines are for the southern subspecies that lives in an area known as the Brigalow Belt North bioregion. This area covers 135,500 square kilometres and includes the towns of Townsville, Bowen, Clermont, Emerald and Collinsville.

The Townsville region has the only known substantial coastal population of Black-throated Finches. There are less well known populations in other parts of the Brigalow Belt North bioregion.





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Left: Distribution of all records of the Black-throated finch up to 2010.

Brigalow Belt North bioregion.

*Right: Distribution of Black-throated Finch records after 2000.* 

P.c atropygialis is the northern subspecies of the Black-throated Finch and is more prevalent.

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Photo courtesy of RA & AM Sutton

## WHAT HABITATS DO BLACK-THROATED **FINCHES LIKE?**

Black-throated Finches live in open eucalypt dominated woodlands - melaleucas and acacias might also be common in the woodlands. In the Townsville region poplar gum woodlands are a favoured vegetation type.

Their use of vegetation is constrained by water because they need to drink every day. They typically nest and breed near water.

Their habitat must provide water, suitable seeding grasses and trees in which to rest and build nests. Their grass nests are dome shaped. Nests may be built in the outer branches of trees, tall shrubs, in tree hollows, in mistletoes and the bases of raptor nests. The main breeding season for the Blackthroated Finch is October to April, depending on the season and location.

Most remnant Black-throated Finch populations are on pastoral lands with intact woodlands. It prefers to feed on seeds that have fallen to the ground.

For an area to provide viable habitat water, seeding grasses and open woody vegetation must be located in reasonable proximity to one another, be available all year round and, with respect to seeding grasses, occur in sufficient abundance to support life.

The area of habitat should be large enough that birds can find all they need. A large habitat area has the chance to support a viable, genetically diverse population.



## PROBLEMS FACING BLACK-THROATED FINCHES

It is estimated that the distribution of the Black-throated Finch has contracted by 50 to 80 per cent. The bird used to live between north east New South Wales and the Atherton Tablelands in Far North Queensland and west to Central Queensland. Now it is rarely recorded south of Clermont.

Nationally it is recognised as endangered which means the bird is considered to be facing a very *high risk* of extinction in the wild.

Threats to the bird include altered fire regimes, increased grazing pressure (from domesticated and non-domesticated animals) and native vegetation clearing. Other problems include predation by feral animals, introduced plants and animals and woody vegetation thickening.

Trapping of the birds is also a concern. In the past trapping was legal; it is now illegal. Urban development is also encroaching on Black-throated Finch habitat.

The lifecycle of grass seed is such that Black-throated Finches can experience food shortages at certain times of the year. Grass seed abundance generally peaks around the early dry season (May to June) and gradually declines through until the next wet season.

Towards the end of the dry season (September to November) the abundance of accessible seed is low and there is little to no replenishment of seed on the soil surface. The onset of rains associated with the wet season (October to December) triggers a significant food shortage as any remaining soil-stored seed germinates or rots. This means grass species capable of producing seed quickly after the first rains are vitally important for breaking the food shortage. Examples of these grass species are early flowering perennials like cockatoo grass (*Alloteropsis semialata* and *cimicina*) and golden beard grass (*Chrysopogon fallax*).

Some other grass species the Black-throated Finch favours are pitted bluegrass (*Bothriochloa decipiens*), windmill grass (*Chloris* spp.), love grasses (*Eragrostis* spp.), panic grasses (*Panicum* spp.), fairy grass (*Sporobolus caroli*), annual Wanderrie grass (*Eriachne armittii*) and pigeon grasses (*Setaria apiculata* and *Setaria surgens*). Although not native, sabi grass (*Urochloa mosambicensis*) is also a good source of seed for the Finch.

Black-throated Finches tend to avoid black speargrass (*Heteropogon contortus*), wire grasses (*Aristida* spp.) and kangaroo grass (*Themeda triandra*).

## WHAT CAN YOU DO TO HELP?

The presence of Black-throated Finches on your property indicates you have a healthy environment and there are lots of things you can do to support their population. You can start by knowing how they use an area to decide what management actions are needed.

For example actions required to protect breeding habitat may differ from actions needed to protect areas where Black-throated Finches intermittently forage during the dry season.

The ideal outcome for the Black-throated Finch would be for all landholders in our area to create conditions that encourage the year-round presence of the birds on their property and for landholders to work collectively to encourage Finches in the broader landscape.

#### MAINTAIN OPEN WOODLANDS

#### Grazing

Grazing is not incompatible with Black-throated Finches provided there is a healthy and diverse grass layer. Identify core habitat by looking for areas that have early flowering perennial grasses near water and trees and where forage and nest sites are available. Rest these areas from grazing for at least 12 weeks during the wet season.

Lightly graze during the dry season. Aim for at least 50 per cent ground cover at the end of the dry season. Ideally, treat areas over 200 hectares in this manner. Create habitat in areas that are more convenient from a property management perspective. This could be achieved by installing water sources that are inaccessible to cattle and near suitable grasses and woodlands.

Consider using fences or yards to control livestock in core Black-throated Finch habitat.

### THERE ARE THREE KEY OBJECTIVES TO PRESERVING HABITAT:

**1**. Maintain open woodlands with a grassy understorey that is dominated by native perennial grasses.

**2.** Maintain accessible water sources near foraging habitat and near woody vegetation.

**3.** Maintain tall, open woody vegetation near foraging habitat and water.



## An ideal landscape to support a viable population of Black-throated Finches would have

- Permanent and seasonal water sources that are accessible within 400 metres of suitable foraging habitat and nesting trees.
- Large areas of open woodland with an understorey dominated by native early flowering perennial grasses and good foraging habitat within 400 metres of permanent water sources.
- Different soil types to promote varied seeding times in grass species.
- Abundant and consistent seed supply.
- No feral pigs or cats.
- Corridors to other similar landscapes.

#### Burning

There is no single burning regime that will benefit Blackthroated Finches. Fire has benefits and negatives and for this reason a diversity of fires is encouraged.

On ungrazed land maintain landscapes that have variety in the timing and intensity of fires and the areas burnt each year. This can be achieved by adopting a fire regime that involves burning fire breaks earlier in the season then following up with early dry season (May to July) cool patch burns in discrete areas. Don't burn entire landscapes at once. Intervals between fires should be five or more years.

Protect dry season habitat, especially grasslands near water, from late dry season fires. Be mindful to also protect grasslands near water sources where Black-throated Finches are breeding. Burn when there is good soil moisture and spell grasslands after fire to reduce woody vegetation thickening and assist in the recovery of native perennial grasses.

On grazed lands the focus should be on preventing extensive and uncontrolled fires. If fires do occur in Black-throated Finch habitat allow grasses to recover before reintroducing stock.

#### Woody vegetation

Consider chemical and/or mechanical control for thinning woody vegetation from the shrub layer to maintain open woodlands. (Of course you need to be considerate of vegetation management legislation before controlling regrowth.)

Dense grass layers suppress germination and growth of woody plant seedlings. Woody vegetation thickening can occur when competitive grasses are regularly removed.

#### Control weeds and feral animals

Weeds compete with grasses the Black-throated Finch likes to eat from. Since Finches like to eat seeds off the ground it is a good idea to control weeds to prevent them becoming monocultures and taking over Black-throated Finch foraging areas.

Feral pigs can dig up vegetation and destroy waterholes. Participate in coordinated control efforts. Feral cats can ambush Finches so aim to remove them from habitat areas and reduce the potential for ambush sites.



## What you can do IN SUMMARY

Maintain vegetation for nesting - a combination of tall trees and shrubs.

Encourage a diverse and vigorous native grass layer.

Incorporate wet season spelling to allow grasses to set seed.

A patchwork of grazing and fire regimes will help maintain Blackthroated Finch habitat diversity.

Example of open woodland habitat of the Black-throated Finch.

Photo courtesy of David Stewart.

Ideal Black-throated Finch habitat has good foraging and nesting sites within 400 metres of water. Manage water levels to prevent drinking sources from drying out, particularly during the dry season and times of drought. Don't forget to check water availability in rested paddocks.

Reduce activities that increase the volume of sediment going into creeks. This may mean excluding or controlling access of stock to creeks and rivers.

It is important to know that Finches need to be able to perch on edges to drink. Unlike some birds Black-throated Finches drink by sucking from the water surface. They will drink from artificial water sources such as dams, cattle troughs and overflow pipes if suitable perches are available. Consider the Finches' drinking habits when upgrading, retrofitting or installing new watering points. Something as simple as putting a stick in the water and leaning it against the side of the trough can go a long way to helping birds get out of deep water.

Avoid activities that pose a contamination risk to drinking sources; this is especially relevant in mined areas.

#### Maintain tall woody vegetation

Trees and tall shrubs provide nesting sites for Black-throated Finches and shelter for cattle. Preserve native trees and tall shrubs in areas used by the Finch. Aim for an open woodland vegetation structure with a sparse shrub stratum.

A lack of younger trees is a sign that planting may be required or that natural regeneration should be encouraged. If recruitment is not happening naturally, replant and maintain native trees until established.

MANAGEMENT GUIDELINES

#### ANNUAL LIFE CYCLE

This is the lifecycle of the Black-throated Finch, highlighting the relationships between the bird's behaviour and the events in its habitat. You can use this to help you with your management decisions during the year.



Photo courtesy of David Stewart.



HOW TO LOOK AFTER THE BLACK-THROATED FINCH



Photo courtesy of Greg Calvert

#### SIGNS OF SUCCESS

There are ways of telling whether you have been successful in promoting an ideal Black-throated Finch habitat on your place.

If all of these measures were carried out Black-throated Finch habitat would have early flowering perennial grasses, such as cockatoo grass, abundant in the vegetation.

Pastures and landscapes are dominated by at least four native grass species. Tree canopies are open (crowns do not overlap) and shrub strata are sparse.

In ungrazed areas less than 20 per cent of the grassy woodlands would receive cool fire treatment (like patchy burns) in most years. On grazed lands fires are absent or only used to prepare fire breaks or treat woody vegetation thickening and weeds.

In a well managed Black-throated Finch habitat large and uncontrolled fires do not occur. Pig damage is minimal and feral cats don't exist.

Another sign of success is that Finches are using water sources that are located within 400 metres of foraging habitat and woody vegetation.

In this ideal scenario the number of Black-throated Finches nesting on your property or in the region remains stable or increases.

## THE RETURN OF THE BLACK-THROATED FINCH

If properties looked like this the Black-throated Finch would have a greater chance of survival in the Brigalow Belt North bioregion. If you watch habitat areas you could see the birds in the early morning around watering holes in dry weather and hear their soft, high pitched calls.

For more information contact the Black Throated Finch Recovery Team at enquiries@blackthroatedfinch.com or have a look at the website www. blackthroatedfinch.com.au

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Photo courtesy of Len Ezzy