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# **WANT TO KNOW MORE?**

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Based on "Indian Myna Handbook" by Alana Parkins further amended by Laura and Kevin Noble.

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# THE INDIAN MYNA **CONTROL PROJECT**

**Indian Mynas were introduced into** Australia in the 1860s in an attempt to control insect pests in market gardens around Melbourne.

The species is widespread in South and Southeast Asia and is now established in most of Fastern Australia. There have also been recent sightings in Darwin, Perth and Adelaide.

Indian Mynas have become a huge problem in cities and urban centres where they have been able to effectively adapt to a range of conditions and feeding options. Equally, they appear in large numbers in rural areas causing nuisance through noise disturbance and contamination of stock feed. They often congregate near cattle farms and dairies where feedlots are readily accessible. Stables and yards with poultry coops are also prime scavenging areas.

In addition to being a nuisance in these landscapes, they nest in tree hollows and will often occupy and aggressively defend multiple hollows, preventing other wildlife from using them. This presents a serious threat to our native species that rely on these hollows for breeding. The Indian Myna Control Project provides education, coordination, support and traps to local communities in northern NSW to help combat the Indian Myna Bird invasion.



#### This booklet will help you:

- > Identify the Indian Myna.
- > Understand the behaviour and habits of Indian Mynas.
- > Stop the invasion in your backyard.
- > Use PeeGee Myna traps.
- > Ensure humane handling of captured birds.
- > Monitor and report bird feeding and roost sites.

Your key volunteer or program coordinator can help identify trapping sites, train volunteers to use the traps and organise the humane disposal of captured Indian Mynas.

Find out more at: www.feralscan.org.au/mynascan or email feralscan@feralscan.org.au for further information.

If you would like to report numbers of Indian Mynas or roost locations contact your local Area Coordinator or Indian Myna Control Group.

For more information on the **Indian Myna Control Project** in your local area refer to the "Contacts" section at the back of this handbook.

# THE PROBLEM WITH INDIAN MYNAS

Indian Mynas are messy birds and nest in tree hollows, palms and under roofs in sheds and houses. They evict animals and birds from nests and attack chicks of other species. They like to breed in tree hollows and will often make additional nests in nearby hollows preventing any other wildlife from using them. They leave their hollows unusable by other wildlife. This is of particular concern, as tree hollows have become an increasingly limited resource for many native animals. Efforts to supplement natural hollows with nest boxes have resulted in many being taken over by Mynas, thereby excluding native species.

Indian Mynas are an aggressive, highly invasive species. They are opportunistic feeders and eat almost anything. In cities and regional centres Mynas congregate in areas where food sources are regularly available, usually near schools, shopping centres, parks and sports fields.

Mynas can often be seen on power lines and in open grassy areas where they hunt for insects and worms.



Mynas in the Clarence Valley

The Mynas scavenge for food scraps near fast food outlets, picnic areas and rubbish bins. They will also take pet food and bird seed from backyards in residential areas.

In rural areas they eat stock feed, grain, pellets and compost. They foul on the backs of livestock and contaminate feed bins and leave an unsightly mess in sheds, stables and anywhere they nest or roost.

Indian Mynas often congregate in large numbers in roost trees, making a loud chattering noise and leaving droppings everywhere. Apart from the reduced aesthetics, clean-up costs can be quite significant.

Mynas can also impact human health, as they are carriers of bird mite and may harbour avian diseases such as psittacosis and salmonellosis.

Mynas are well adapted to Australian conditions and breed very quickly.

# Myna's seasonal behaviour

ABIT

and

EHAVIOUR

They form pairs for breeding from September to March and move to suitable nesting sites, such as tree hollows, building cavities and exotic palms. Mynas are prolific breeders and can raise multiple clutches of 4-6 chicks each year. The fledgling period lasts for 20-30 days and when the juveniles are ready to fly they travel in small family groups.

From Autumn the Mynas join up and move to communal roosts where there can be large numbers of birds. During the day they spread out in small groups to find food.

Come September, the Mynas again pair up and prepare to nest and breed and the cycle starts again.

Hundreds of Mynas can roost in a single tree or building, especially near a regular food source like a horse stable or poultry farm.

Indian Mynas are not migratory birds; however resident populations display some local movement. They have been observed regularly moving between roost sites and foraging grounds, with additional seasonal movement between habitats



Exotic trees forming a typical Indian Myna roost site.

#### Rural areas

Mynas prefer open woodland and grassland to forested areas. They particularly favour open grazing country and freshly slashed or ploughed fields. Mynas follow major roads and arterial routes to spread into new areas, especially in places where the natural landscape has been modified.

Indian Mynas live with and off humans. They thrive in areas of human settlement, often occupying disturbed habitats.

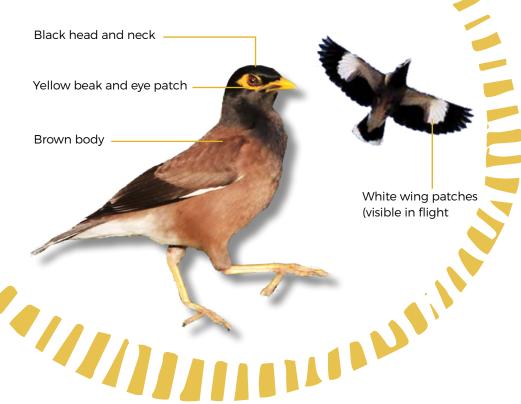
Indian Mynas are attracted to animal feed, especially horse, goat and pig feed, chicken pellets, and fruit. They will also feed on animal manure. Mynas will nest in out - buildings, house roofs, nest boxes and tree hollows in paddocks and on the edge of bushland. Shooting can scare them off but they will return if food is available.

#### Residential areas

Mynas are well adapted to urban areas where feeding sites are plentiful. They are often seen resting on power lines, prowling schools grounds, picnic areas and sports fields for food scraps. They nest in gaps in city buildings, petrol stations, air conditioners, and in house roofs and gutters. In backyard gardens Mynas invade nest boxes and displace native birds and animals. They feed on nectar and seed put out to attract native birds and particularly favour left-over pet food.

# **INTRODUCED PEST**

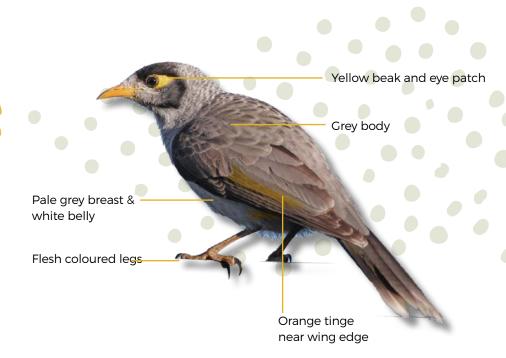
Indian or Common Myna (Acridotheres tristis)



- > In flight, white wing patches are clearly visible under their wings.
- > Both birds have yellow beaks and a yellow patch around their eyes.
- > The key difference between the two birds is that the Indian Myna has a brown coloured body, whilst the Noisy Miner is mottled grey and white.
- > Indian Mynas are predominantly brown with a black head and neck.
- > Mynas spend much of their time foraging on the ground, where they can often be observed moving about with a distinctive 'strutting gait'. The Noisy Miner is more at home in trees and shrubs but when on the ground it hops.

# **PROTECTED NATIVE**

Noisy Miner (Manorina melanocephala)



- > The Noisy Miner is mainly a honeyeater > Noisy Miners are a protected native with a much more limited diet. It forages for nectar and small insects.
- > Apart from the physical similarities, both birds appear to share common behavioural traits which can lead to incorrect identification.
- species, and must be released if captured.
- > The Noisy Miner also breeds rapidly. forming family groups which move around in search of food. They can exhibit territorial behaviour, chirping boisterously and working together to chase other birds away.



# **MANAGING THE INVASION**

Trapping alone will not keep the Indian Mynas under control. Mynas thrive where there is easy access to food. You can reduce their available food source in the following ways:

- > Leaving out seed and other food for native birds will attract Indian Mynas and they can quickly dominate your garden. Mynas will totally exclude all other birds and in the long term you may be left with a garden full of Indian Mynas. If you see Mynas at your bird feeder or in your garden the best outcome for native birds is to cease distributing feed.
- > Planting a wide range of local native plant species in your garden will provide a diversity of habitats for native birds. Indian Mynas prefer foraging in areas with a clear understorey. Gardens with a reduced lawn area containing a mixture of native trees, shrubs and herbs, especially with a dense understorey, will attract a variety of bird life without providing a suitable habitat for Mynas.
- > Feed pets inside, or if that is not possible, put pet food inside during daylight hours.
- Ensure chicken and duck pens are Myna proof. Feed poultry inside a secured area.
- > When feeding goats or horses, it is best to stay with the animals while they are feeding and clean up spilled

- or leftover pellets or grain. Also bag manure around stables and cover compost heaps.
- > Mynas nest in tree hollows, roofs, exotic trees and the dead fronds of palms. You can reduce their available nest site in the following ways:
- > You can reduce nesting opportunities by blocking any holes in roofs and eaves.
- > Keep palms well trimmed. Avoid planting clumps of exotic species such as Cocos Palm (Cocos plumosa), Slash Pine (Pinus elliotii), Radiata Pine (Pinus radiata) and Umbrella Tree (Schefflera actinophylla), as these are all preferred Indian Myna roosting tree sand are best avoided.

Bird mite infestations can cause severe itching and rashes - if you have a Myna nest in your roof, gutters, a backyard tree or a bird box in your garden, you should destroy it before the eggs hatch. Put all contents of the nest in a garbage bag in your garbage bin and clean the nesting area up thoroughly.

Always wear gloves when handling Indian Mynas and their nests.

## TRAPPING PROGRAM

Trapping is an effective method of culling Indian Myna numbers, limit population expansions and reduce the threat to our native birds and other hollow using animals

Trapping require humane treatment and careful handling of all captured birds in line with animal welfare protocols.

#### PeeGee's Myna Trap

There are several traps designed to exploit Myna behaviour. One example is the PeeGee's Myna Trap, a double-chambered wire trap which is suitable for use in backyards and gardens. It is the most commonly used and has proved to be successful in Indian Myna trapping programs across the eastern states.

Talk to your local Project Coordinator for information on borrowing a trap. If you would like to build your own trap, visit www.brrln.org.au/indian-mynacontrol for more information and a link to a step by step instructions on their construction.

Ensure that the birds you are aiming to trap are Indian Mynas and not native Noisy Miners!

#### **One-way Walk in Tunnels**

Indian Mynas walk about looking for food. Myna traps have walk-in one-way tunnels giving access to a containment chamber. Most traps have two and dual chambers, whilst some experimental traps are circular or have multiple tunnels.



#### **Vertical Funnel**

Within the PeeGee design, once inside the entrance chamber, the Mynas will go up the vertical funnel into the holding chamber from which there is very little chance of escape.



# TRAPPING PROCEDURES

#### A Guide to using the PeeGee's Indian Myna Trap

- > No bird, whether pest or native, is to be treated cruelly or subjected to harsh conditions: please observe the requirements of the NSW Prevention of Cruelty to Animals Act 1979. When particiapting in a trapping program, you are required to sign an animal welfare protocol agreement.
- > Indian Mynas are very intelligent and wary birds. For your trapping to be successful you will need to be patient and persistent and follow the steps of trapping process.
- > Ensure that the birds you are aiming to trap are Indian Mynas and not native Noisy Miners. Noisy Miners are protected by law and it is illegal to trap them.
- > This trap is intended to catch Indian Mynas where they are known to come down onto the ground and feed. If you have not yet had these birds feeding on the ground at your site, trapping with PeeGee's trap is less likely to be successful.
- > Keep pets and children away from the trap as Indian Mynas are extremely wary birds and are sensitive to disturbance. Pets may also eat the bait intended for the birds.
- > Do not approach the trap during daylight hours. Even if you can't see

- the Indian Mynas they can probably see you. If Indian Mynas see you handling the trap, particularly once you have a trapped bird, they will avoid the trap.
- > Only set up the trap when you are able to check it at least daily. Ensure that the trap is stored away safely at any time that it is not in use, as this will prevent accidental trapping of non-target animals. This will also reduce the chance of vermin eating your bait.
- > If you trap any native species, you must release them as soon as possible.
- > Traps on loan should not be modified or changed in any way.
- > Provide shade, food and fresh water in the larger chamber (holding chamber) at all times for captured birds.
- > If Ibis are around the trap put it away until they have not been seen for a few days.



# TRAPPING PROCEDURES

#### **Trapping Process**

To maximise trapping results please complete each step before moving to the next. Duration of trapping can vary widely from site to site and can take anywhere from a few days to a several weeks.

#### Step 1 - Get your bait.

You need to use suitable bait. The most attractive bait seems to be 'Lucky Dog Minis - Minced Beef, Vegetable and Pasta Flavour'. Yellow/orange coloured snacks such as Cheezels and Twisties (or equivalent cheaper brands) also seem to work well! Do not use grain-based foods (birdseed and bread etc.) as this attracts non-target birds such as crested pigeons and parrots.

#### Step 2 - Choose a spot to trap.

This should be a site that you have seen the Indian Mynas come down on to the ground. If possible, the site should be flat and open with short grass, however trappers have had success trapping in various other settings including on the roof of carports, or on verandas. Keep children and pets away from the trap.

#### Step 3 - Restrict access to food.

Make sure that any food the Mynas have been accessing at your place (scraps, pet food, chicken feed etc.) is no longer available to them. Hungry birds are more likely to be lured into your trap. If the birds are feeding at a neighbours, it is recommended approaching them and asking if they would mind restricting available food for the time you are trapping.

#### Rural or semi rural alternatives

From this point there are two alternative trapping methods generally used. For rural or semi rural areas free feeding appears to encourage more natives around your trap. So for these areas we suggest you go directly to Step 6. However where there are lots of Mynas and only a few native birds then perhaps you should try Step 4 and 5 first.



# **TRAPPING and HANDLING**

#### Step 4 - 'Free-feed' the birds.

This is done to teach the Mynas that this is a safe and regular source of food. Place a flat white plate or plastic container lid at your site and keep this topped up with bait. Avoid going near the plate when there are Mynas around. Other birds, such as Magpies and Pee Wees, may steal some bait, but do not chase them away as Indian Mynas will learn to eat from the plate by watching these less wary birds. Make sure you see the Mynas eating the bait before moving to the next step.

#### Step 5 - Place trap next to the plate.

By placing the trap near the plate of food for a day or so. The Mynas will perceive the trap as being a harmless object.

#### Step 6 - Bait the trap.

Take away the 'free-feeding' plate and place a white plate inside the smaller (entrance) chamber of the trap. Put a handful of bait on the plate. Ensure the birds can see the feed in the entrance chamber from the tunnel, but will not be able to reach it until they have entered the trap. Additionally, put a small amount of bait inside the tunnel entrances to attract the Mynas. Ensure that only small amounts of bait are used in the tunnel as excess bait may deter them from fully entering the trap.

#### Caller birds

Trapped Indian Mynas are often used as callers to attract other Mynas down to the ground, where the bait should lure them into the trap. Caller birds must be cared for in accordance with the NSW Industries & Investment SOP for Trapping Pest Birds (BIRO02). Your local coordinator can give you more details.

### Once you have trapped Indian Mynas

If Mynas are to be gassed it is preferable to use a trap designed for easy transfer (see photo pg. 12) The birds can be transferred to the smaller transfer cage by connecting the holding chamber and transfer cage, with door openings aligned. Birds can then be coaxed from the chamber to the cage, without the need for direct handling. A towel should be placed over the transfer cage to keep birds calm during transportation. It is preferable that Mynas be euthanased off-site.

### **EUTHANASING PROCEDURES**

The aim of euthanasia is to dispose of the Mynas in a way that eliminates or minimises the stress experienced prior to becoming unconscious. Trap operators must be willing to accept that humane killing of trapped birds is an important responsibility. Your field oficer or program coordinator can assist you to arrange for Mynas to be humanely euthanased. The preferred options for euthanasing Indian Mynas are:

#### Cervical dislocation

This method is commonly referred to as "breaking the neck" but would more accurately be described as "snapping the spine." The goal is to quickly separate the spinal cord from the brain to provide a fast and painless death

#### Inhalation of carbon dioxide (CO2)

Euthanasia of Mynas by carbon dioxide (CO2) must be arranged beforehand with your coordinator or other support service. The birds are best delivered for gassing in the transfer cage provided with your gassing trap. Please cover cage during transfer.

This cage will be placed in a container and the Mynas are put to sleep with a small dose of CO2. The container is sealed for a few minutes to retain the gas and the Mynas die quickly without stress.

The NSW Department of Primary Industries does not consider it humane to euthanase birds with exhaust gas from a car. This can vary in other states, so it is best to check your local rules.

#### Injection of a barbiturate

This is least preferred of the three recommended methods, as it requires the expertise of a qualified vet. If using this option please make your own arrangements with the vet.

#### **Disposal**

Wrap dead Mynas in newspaper and place them in your household garbage bin or place them in your compost.



The Mynas are placed in a plastic container and put to sleep with CO2 gas.

# **HANDLING NATIVE BIRDS**

Whilst traps and baits are intended specifically to target Indian Mynas, some native birds may also be caught.

In the past, it has been observed that some of the most common non-target native species trapped are Pee Wees (*Grallina cyanoleuca*) and Satin Bower birds (*Ptilonorhynchus violaceus*). If these birds are common in your area, try setting the trap with a live Myna (caller) in the cage. This will help to deter native birds, whilst attracting other Indian Mynas to the trap. Your local coordinator can also advise on other ways to minimise trapping native birds.

Ensure the trap's holding chamber contains plenty of food and clean water for all trapped birds. If you find a native bird in the trap, open the door provided to release it. Do not handle native birds unless they are injured. If they are dehydrated or lethargic, keep them in

a box in a dark and quiet place to allow them to recover

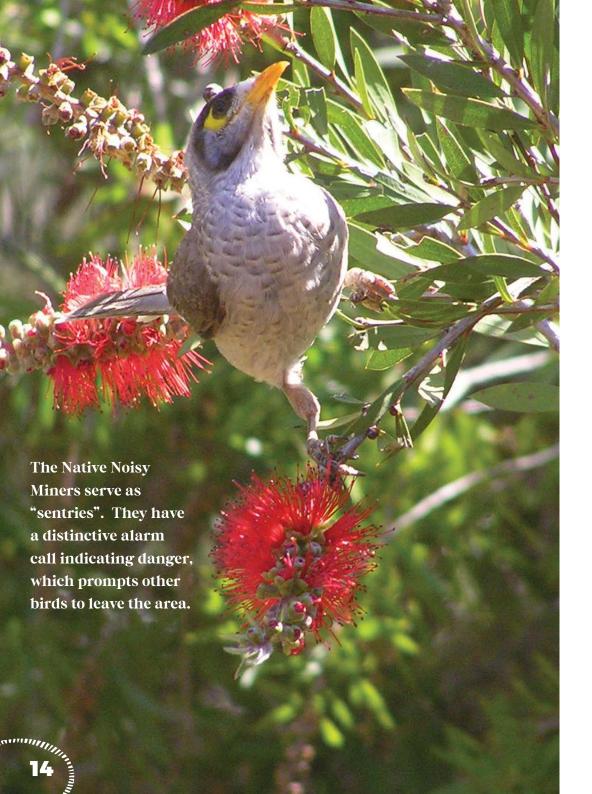
Do not attempt to force food or water to an injured or stressed bird.

Trappers in the past have also encountered juvenile natives such as Crimson Rosella chicks, which have been evicted from their nest hollows by Indian Mynas. If chicks are still alive, carefully place them in a cardboard box lined with leaf litter or cloth and place the box in a dark, quiet spot. Immediately contact your nearest wildlife rescue organisation for further care instructions.

Refer to the "Contacts" list in the back of the Handbook for your nearest wildlife rescue or animal welfare organisation.



Photo: Andrew Mercer



# **REPORTING AND MONITORING**

Reporting and monitoring of Indian Mynas enables tracking and mapping of where the birds are and helps us gather information on where to trap and the effectiveness of trapping.

#### The online MynaScan

**www.feralscan.org.au/mynascan/** is the preferred method of recording Indian Mynas in NSW. It is easy to use and ensures records get to the organisations that deal with their control.

MynaScan is a free community website developed to help community members, pest controllers and biosecurity groups to document sightings and the damage that myna birds cause.

Anyone can use MynaScan to record observations, upload photos, and develop a detailed map of myna bird activity in their local area.

MynaScan is part of the FeralScan community program, and it is easy to use. Information entered by people can be used to help coordinate control efforts with local communities, or help identify areas where myna control is a priority.

People can also use the website to access resources, connect to local groups, and upload images for accurate record keeping.

MynaScan can notify local groups about nesting sites or myna bird hotspots, and can be used to alert authorities about detections of myna birds in new areas, such as rural towns. It is managed by the NSW Department of Primary Industries and Centre for Invasive Species Solutions.

Find out more at:

www.feralscan.org.au/mynascan or email feralscan@feralscan.org.au for further information.



# **REPORTING AND MONITORING**

#### Reporting

#### **Roost Sites**

Report site locations, the type of tree or building the Mynas are occupying and estimate the size of the colony. The roost site will be mapped and where possible monitored. In some areas, strategic shooting programs to control Indian Mynas at their nesting and roost sites have been implemented. Contact your local program coordinator for more information.

#### **Feeding sites**

Report location, number of Mynas seen regularly and preferred food source.

#### **Trapping**

Feedback from anyone trapping Indian Mynas is extremely valuable in getting the bigger picture, achieving a coordinated approach and best outcomes. Please contact your field officer with your monthly tallies, and for more information on data recording procedures. Any trapping issues or unusual Indian Myna behaviour should also be reported.

#### **Monitoring**

Volunteers can keep track of a particular population by doing regular Myna counts at roost sites and observing details on aspects such as communal behaviour and flock movements. Speak to your field officer or local program coordinator about being an active volunteer in the reporting and monitoring process.



#### **CONTACTS**

For assistance with Indian Myna Control

#### **Border Ranges-Richmond Valley Landcare**

Telephone: 6632 3722

Email: landcare.support@brrvln.org.au

Web: www.brrvln.org.au

#### **Clarence Valley Conservation in Action**

Telephone: 6649 4712 Email: mynas@cvcia.org.au Web: www.cvcia.org.au

#### **Lismore City Council**

Telephone: 1300 87 83 87

Email: council@lismore.nsw.gov.au Web: www.lismore.nsw.gov.au/

#### **Richmond Valley Shire Council**

Telephone: 6660 0300

#### **Richmond Landcare**

Email: info@richmondlandcare.org Web: www.richmondlandcare.org

Web: www.graniteborderslandcare.com.au

#### **Tweed Shire Council**

Telephone: 6670 2278

Email: indianmyna@tweed.nsw.gov.au Web: www.tweed.nsw.gov.au/IndianMyna

#### **Wildlife Rescue Groups**

Northern Rivers Wildlife Carers 02 6628 1866

#### **WIRES**

1300 097373

#### Other links

Birds in Backyards - www.birdsinbackyards.net Canberra Indian Myna Action Group - www.indianmynaaction.org.au MynaScan - www.feralscan.org.au

#### Photo credits

Thank you:

- · Laura Noble for the photo of the Native Noisy Miner on page 14.
- · Bevan Pugh for the photo of the Indian Mynas in traps on page 16.
- · Pam Kenway and Kevin Noble for the others.

### Supported by:



