



**Clarence Valley
Conservation in Action**

**INDIAN MYNA PROJECT
HANDBOOK**



WANT TO KNOW MORE?

Contact the Indian Myna Coordinator in your local area for more information on the trapping program, or to report sightings of Indian Mynas.

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Edited version 2019 - CVCIA Indian Myna control program by Kevin & Laura Noble.

Originally written and compiled by Tien Pham when she was the Indian Myna Control Project Officer - Coffs Harbour, Bellingen and Nambucca Shires and Joy van Son (Nambucca Valley Landcare). Based on "Indian Myna Handbook" by Alana Parkins .

With contributions from Pamela Gray (Indian Myna Control Project Officer - Byron and Tweed Shires) & Cathy Eggert (Hastings Landcare).

The Indian Myna education pack was originally designed by Mira Design Studio.

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 15.

Pam Kenway and Kevin Noble for the remainder.

THE INDIAN MYNA CONTROL PROJECT



Indian Mynas were introduced into Australia in the 1860s in an attempt to control insects in Melbourne market gardens. Originally wide spread in South Asia, they have now established over most of Eastern Australia and are spreading to other parts of the country with sightings recently in Darwin, Perth and Adelaide.

They have become a huge problem in cities and urban centres where they have been able to effectively adapt to a range of conditions and exploit a wide variety of food types. Mynas also thrive in rural landscapes where agricultural activities provide them with a range of habitats and feeding options. They often congregate near cattle farms and dairies where feedlots are readily accessible. Stables and yards with poultry coops are also prime scavenging areas for Indian Mynas.



In addition to being a nuisance in these landscapes, their presence in ever-increasing numbers is a serious threat to our hollow dwelling native birds and animals.

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.

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

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



THE PROBLEM WITH INDIAN MYNAS

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

Indian Mynas are messy birds which 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 etc. unusable by other wildlife. This is of particular concern, as tree hollows have become an increasingly limited resource for many native animals.

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.

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 any where 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 on 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.



IDENTIFICATION



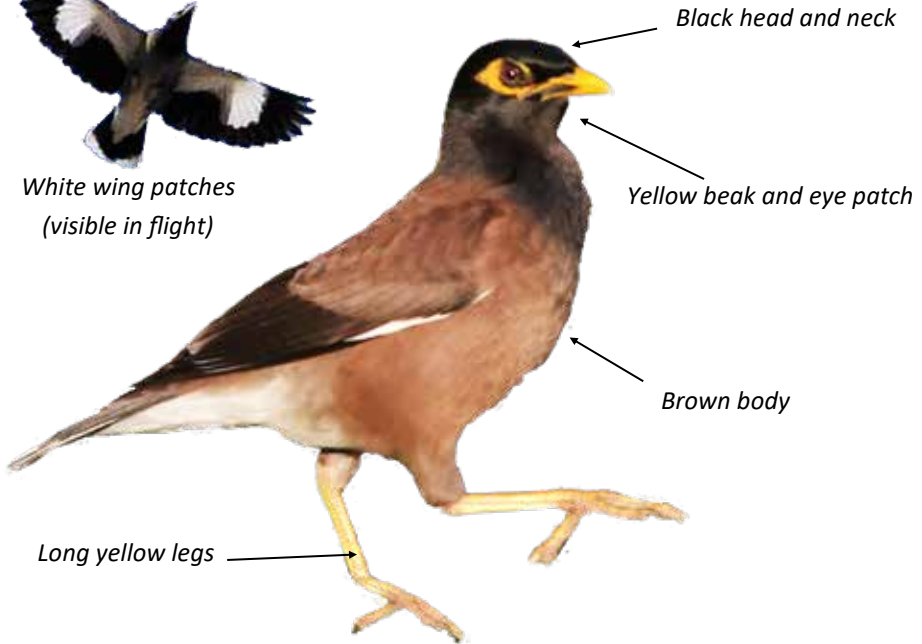
Introduced pest

INDIAN or COMMON MYNA

(*Acridotheres tristis*)



White wing patches
(visible in flight)



Black head and neck

Yellow beak and eye patch

Brown body

Long yellow legs

Both birds have yellow beaks and a yellow patch around their eyes.

The key difference between the two birds:

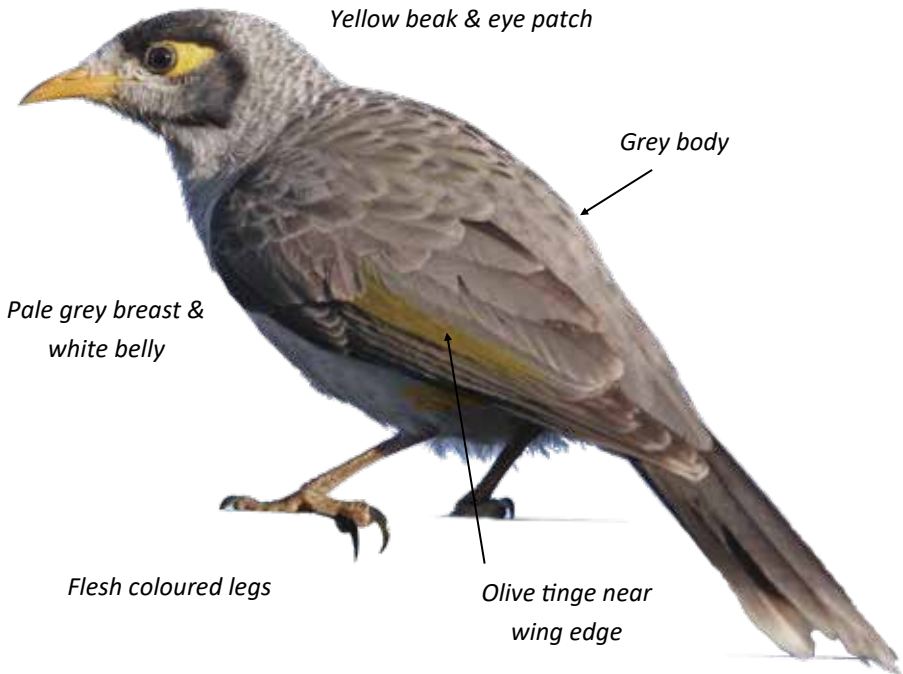
- Indian Mynas are predominantly brown with a black head and neck;
- In flight, white wing patches are clearly visible under the Myna's wings;
- Mynas spend much of their time foraging on the ground, where they can often be observed moving about with a distinctive erect 'strutting gait'.
- Noisy Miner is mottled grey and dull white with a bit of black on the head;
- In flight, Noisy Miners don't have white wing patches;
- A Noisy Miner is more at home in trees and shrubs but when on the ground it hops or 'waddles'.



IDENTIFICATION

Protected Native

NOISY MINER (*Manorina melanocephala*)



- The Noisy Miner is predominantly a honeyeater with a much limited diet. It forages for nectar and small insects.
- Noisy Miner' nest is a sparse cup of twigs, grass, etc on branches of trees an shrubs, they do not nest in hollows like the Indian Myna.
- Noisy Miners are a protected native species, and must be released if captured.
- Apart from some physical similarities, both birds appear to share common behavioural traits which can lead to incorrect identification. The Noisy Miner can breed 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.



BEHAVIOUR and HABITS



Myna's seasonal behaviour

They form pairs for breeding from September to March and move to suitable nesting sites, such as tree hollows, cavities in buildings and sheds 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 April the Mynas join up and move to communal roosts where there can be large numbers of birds. Each 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. When their numbers get so large that food becomes scarce, a new colony will be established near another food source.

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.

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 scares 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.



Exotic trees forming a typical Indian Myna roost site.



The Indian Myna belongs to the Starling family; a group which includes the Common Starling another invasive species



MANAGING THE INVASION

Planting a wide range of local native plants in your garden will provide a diverse habitat for native birds

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 refrain from putting out feed until Mynas have left the area.
- 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:

- Block any holes in roofs and eaves.
- Monitor any nest boxes for Indian Mynas.
- 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 trees.

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 the nest in a garbage bag and place in your garbage bin. Clean the site thoroughly.

Always wear gloves when handling Indian Mynas and their nests.



TRAPPING PROGRAM



The aim of trapping is to control the Indian Myna population explosion, thereby reducing the threat to our native birds and animals. Reducing the existing Indian Myna population by trapping requires humane treatment and handling of all captured birds. Everyone who participates in trapping must adopt the animal welfare protocol.

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, or to obtain the PeeGee's Trap construction plans. The step by step building instructions are easy to follow and the materials required to build your own trap are inexpensive.



Vertical Funnel

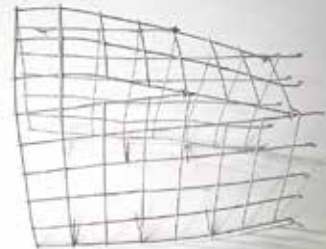
Once inside the smaller trapping chamber, the Mynas will go up the vertical funnel into the larger holding chamber from which there is very little chance of them escaping.

Walk in Tunnels

Mynas walk upright when on the ground.

Traps rely on this and have walk in tunnels that taper down causing the mynas crouch to enter. Once inside the smaller trapping chamber they stand upright again and then find their way via the funnel to the large holding chamber.

Most traps have two tunnels, but some experimental traps are circular and have more tunnels.



TRAPPING PROCEDURES

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

A Guide to using the PeeGee's Indian Myna Trap

- No bird is to be treated cruelly or subjected to harsh conditions: please observe the requirements of the NSW Prevention of Cruelty to Animals Act 1979. You may be 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, then use of a caller bird can usually bring nearby birds to you (see page 11).
- 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.
- If you trap any native species, you must release them as soon as possible.
- Do not approach the trap during daylight hours, except to release a native. If Indian Mynas see you handling the trap, particularly once you have caught a myna, they will avoid the trap. Even if you can't see the Indian Mynas they can probably see you.
- Only set up the trap when you are able to check it at least twice daily.
- Any time that the trap is not in use, ensure it is stored away safely with the doors open, as this will prevent accidental trapping of non-target animals.
- If your trap is on loan it should not be modified or changed in any way.
- Provide food and fresh water in the larger holding chamber at all times for captured birds. The roof and shade cloth sides will provide sufficient shelter.
- If troublesome natives 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 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' (Mynas seem to prefer red-brown colours) 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 volunteers 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 may be worth 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 can try Step 4 and 5.



TRAPPING and HANDLING



The use of caller birds can significantly increase your chance of trapping successfully

Step 4 - 'Free-feed' the mynas.

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 become accustomed to the trap and perceive it as being a harmless object.

Step 6 - Bait the trap.

Place the feeding plate inside the smaller trapping chamber of the trap. Put a handful of bait on the plate. Ensure the birds can see the feed in the trapping chamber from the tunnel, but will not be able to reach it until they have fully entered the trap.

Additionally, put a few bits of bait inside the tunnel entrances to encourage the Mynas to enter.

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 Department of Primary Industries SOP for Trapping Pest Birds (BIR002). Your local coordinator can give you more details.

Once you have trapped a Myna

- If Mynas are to be gassed it is preferable to use a trap designed for easy transfer (see photo page 12) The birds can be moved to the smaller transfer cage by connecting it to the holding chamber with door openings aligned. Birds can then be coaxed from the chamber to the transfer cage, without the need for direct handling. The transfer cage should be covered during transportation.
- Use gloves when handling live or dead birds as they may carry disease. When handling the trap or trapped birds be careful of any sharp edges. Mynas are easy to handle, if you hold their wings firmly against their bodies they usually will not peck or fight.
- Clean the trap. You may need to hose or scrub it down. Indian Mynas are often hesitant to enter a dirty or smelly trap. Relocate the trap if the area becomes soiled from captured birds. They like to



EUTHANASING PROCEDURES

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

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 key volunteer or program coordinator can assist you to arrange for Mynas to be humanely euthanased by experienced volunteers.

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 key volunteer. The birds are best delivered for gassing in the transfer cage provided with your gassing trap. Please cover cage.

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

It requires the expertise of a qualified vet. If using this option please make your own arrangements with the vet. Some vets will provide this service free of charge.

Disposal

Wrap dead Mynas in newspaper and place them in your household garbage bin or place them in your compost. Can be put in your green bins (if applicable)



HANDLING NATIVE BIRDS



Handling of Native Birds

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

In the past, volunteers have observed that some of the most common non-target native species trapped are Pee Wees, Satin Bower birds and Crested Pigeons

If these birds are common in your area try setting the trap with a live Myna (caller) in the cage. This will often help to deter native birds, whilst attracting other Indian Mynas to the trap. Your local key volunteer 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. If possible 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.

Injured Wildlife

Volunteers in the past have encountered juvenile natives such as Crimson Rosella and Kookaburra 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. If chicks are unfeathered, provide immediate warmth by placing a hot water bottle wrapped in a towel inside the box. Immediately contact your nearest wildlife rescue organisation for further care instructions.

Wires Northern Rivers
Emergency Hotline (02) 6628 1898

Northern Rivers Wildlife Carers
Telephone: (02) 6628 1866

Tweed Valley Wildlife Carers
24 hour Hotline (02) 6672 4789

Northern Tablelands Wildlife Carers
Telephone: 1800 008 290





The Native Noisy Miners serve as “sentries”. They have a distinctive alarm call indicating danger, which prompts other birds to leave the area

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.

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

We need feedback from all trappers. Please contact your key volunteer 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 key volunteer or local program coordinator about being an active volunteer in the reporting and monitoring process.



CONTACTS



For assistance with Indian Myna Control

Armidale

Southern New England Landcare
Telephone: 6772 9123
www.snelandcare.org.au

Ballina

Ballina Shire Council
Telephone: 6686 4444

Bellingen

Bellingen Landcare Inc.
Telephone: 6655 5088
www.bellingenlandcare.org.au

Border Ranges - Richmond Valley

Border Ranges—Richmond Valley Landcare
Telephone: 6632 3722

Byron

Byron Shire Council
Telephone: 6627 0000

Clarence Valley

Clarence Valley Conservation in Action
Telephone: 0456 472 177
www.cvcia.org.au

Coffs Harbour

Coffs Harbour Landcare
Telephone: 6651 1308
www.coffsharbourlandcare.org.au

Glen Innes

GLENRAC INC
Telephone: (02) 6732 3443
www.glenrac.org.au

Gwydir Shire

Northern Slopes Landcare
Telephone: (02) 6724 2052
www.northernslopeslandcare.com.au

Nambucca Valley

Nambucca Valley Landcare
Telephone: (02) 6564 7838
www.nvlandcare.org.au/resources

Port Macquarie Hastings

Hastings Landcare
Telephone: (02) 6586 4465
www.landcare.home.blog/indian-myna-control/

Inverell

Gwymac Landcare
Telephone: (02) 6721 1241
www.gwymaclandcare.com.au

Lismore

Lismore City Council
Telephone: 1300 87 83 87
www.lismore.nsw.gov.au

Richmond Valley

Richmond Valley Shire Council
Telephone: 6660 0300
Richmond Landcare
www.richmondlandcare.org

Tenterfield and surrounds

(extends to Mingoola & Stanthorpe Qld)
Granite Borders Landcare
Telephone: 6736 3500
www.graniteborderslandcare.com.au

Tweed Valley

Tweed Shire Council
Telephone: 6670 2278
www.tweed.nsw.gov.au/IndianMyna

Brisbane Qld.

Brisbane City Council
Bulimba Catchment Management Services
www.bulimbacreek.org.au

Gold Coast Qld.

Gold Coast City Council
Telephone: (07) 5581 6381 or 1300 465 326

For more locations

Check the CVCIA website

www.cvcia.org.au/common-mynas/indian-myna-web-links
or Email: mynas@cvcia.org.au

Other links

Birds in Backyards

www.birdsinbackyards.net

Canberra Indian Myna Action Group

www.indianmynaaction.org.au



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Glen Innes Natural Resources Advisory Committee



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