

# AUSTRALASIAN BITTERN

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MATUKU-  
HŪREPO

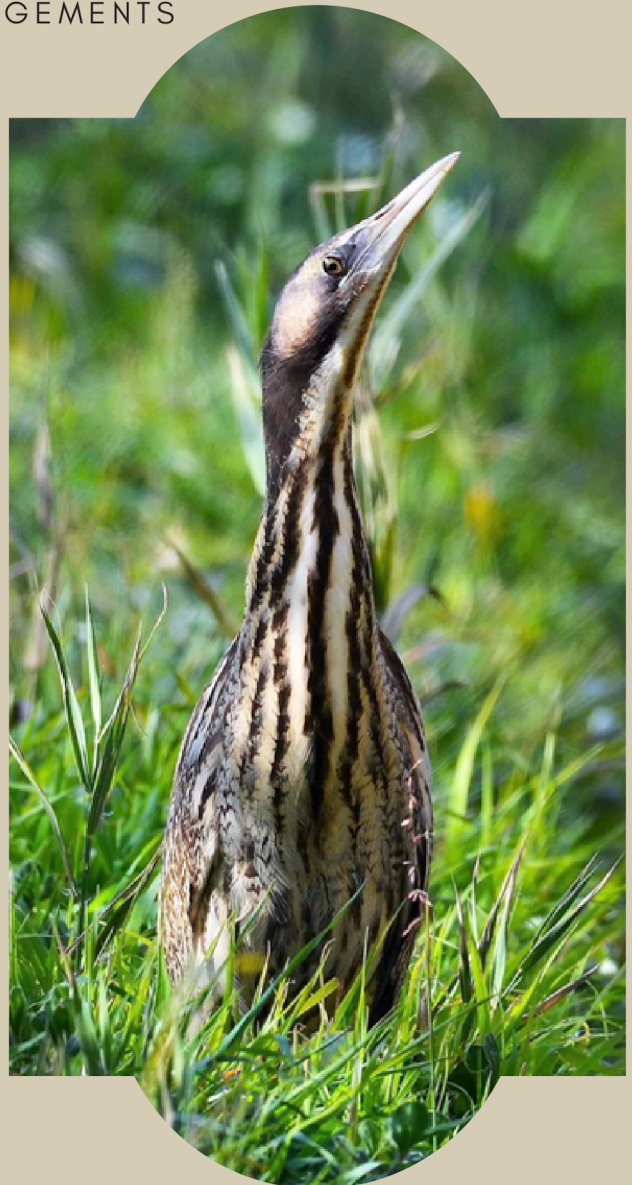
  
LOVE BITTERN  
PROJECT

EDUCATIONAL RESOURCE



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# WHY SHOULD WE CARE ABOUT BITTERN?



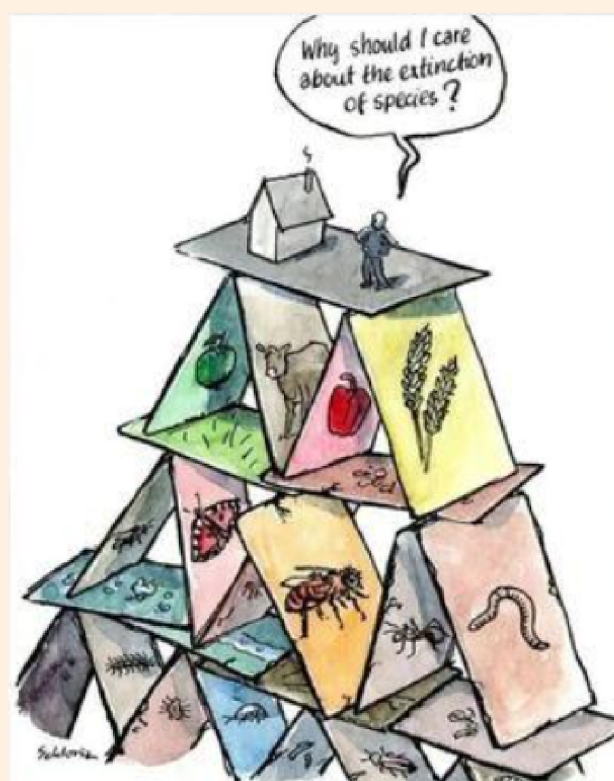
BITTERN ARE LISTED AS 'THREATENED - NATIONALLY CRITICAL'  
**...thats just one conservation status away from extinction.**

**Everything is connected**, so when a species goes extinct, this affects other species.

Bittern are among our most severely threatened **native** species, and face an immediate high risk of extinction.

There is thought to be less than 1000 left in New Zealand. In New Zealand bittern are more rare than Kiwi!

If we look after bittern, other species, such as native birds, fish, invertebrates, molluscs and plants that are all part of a healthy wetland ecosystem will benefit.



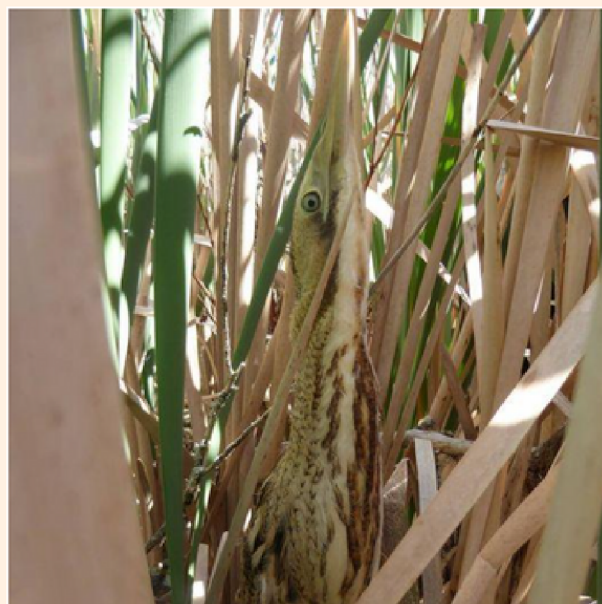


# WHAT DO BITTERN LOOK LIKE?



A member of the heron family, Australasian Bittern or Matuku-hūrepo (*Botaurus poiciloptilus*) are large stocky birds streaked with brown feathers which help them camouflage in the rushes or reeds.

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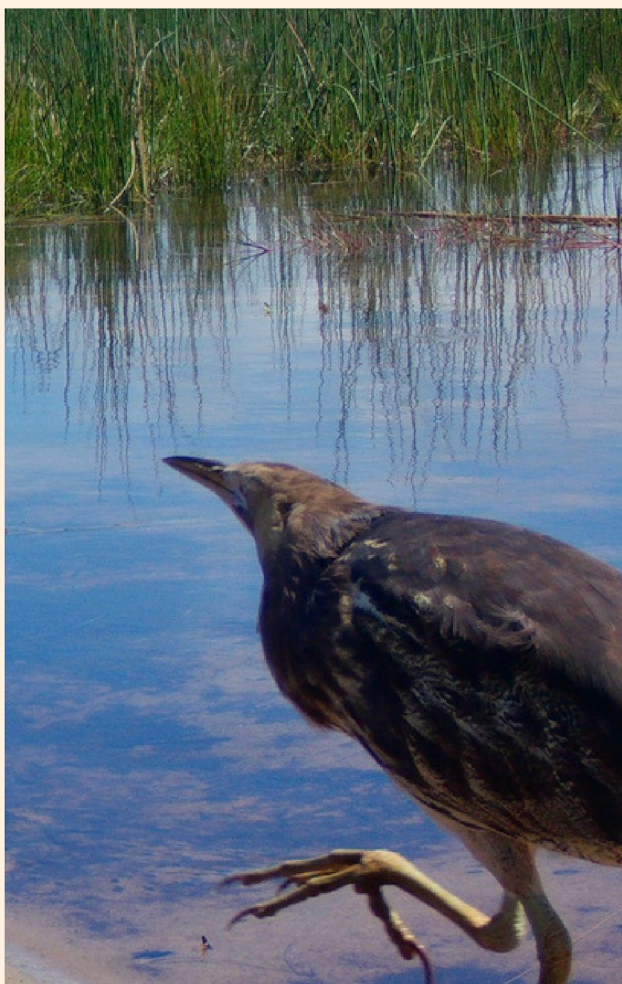


Australasian Bittern are 74cm tall (thats about the height of a dining room table!) when mature, females weigh around 900g and are smaller than males which are around 1400g.

Bittern are a mottled brown colour with darker patches on their backs and a pale buff coloured underside heavily streaked with brown.

**Bittern are really shy birds.** When seen they will often stand motionless, with neck and bill pointed skyward, swaying with the reeds, and slowly lower their head into the vegetation or fly away to hide.

# WHERE ARE BITTERN FOUND?



Australasian Bittern are found in wetland habitats where there is clear shallow water to feed and dense reeds, rushes or other plants to provide shelter.

Research has found that Bittern utilise a network of wetlands, within a 15 km radius, seasonally, with more recent research showing bittern can travel ~500 kms away, stopping over in a network of feeding habitats on the way

Bitterns mostly inhabit mineralised and semi-mineralised wetlands, however other sites regularly visited include raupō-fringed lakes, spring-fed creeks with cover and areas of rank-grass along paddock/drain edges.

Australasian Bittern are found in declining numbers in New Zealand, Australia and New Caledonia.

In New Zealand, Bittern numbers have decreased drastically as 90% of their **wetland habitat** has been destroyed to make towns and farms or degraded by pollutants or sedimentation.





# WHAT DO BITTERN EAT?



BITTERN HUNT FOR EELS (TUNA) AND FISH...  
 ... **but they need clear shallow water to see their prey.**

Australasian bittern feed mainly on fish, including eels, but they also take spiders, insects, molluscs, worms, freshwater crayfish, frogs and lizards.

Bittern hunt by stalking or standing very still before lunging super fast to spear or catch their prey in their beak.

Bittern need to see their prey, so mainly hunt during the day. The water also needs to be clear and shallow. The ideal depth is about 15cm of water.

**Protect the food-chain...** by helping to protect or provide the right habitat for tuna/eels and fish to thrive you are helping bittern and other species too!



**Tips for observing bittern feeding.** Get familiar with your wetland and waterways, find where the shallow water is, where are the fish? (in the morning, afternoon, on different tides). Create a map and make a hide to observe from (if there isn't enough cover) - take your binoculars and be really patient and quiet!

# NESTS, EGGS AND RAISING YOUNG

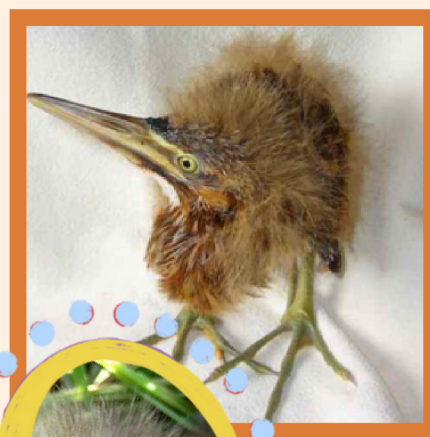


MOTHER BITTERN SIT ON THE NEST AND RAISE THEIR YOUNG  
**...which makes females more vulnerable to predation.**

Bittern make a nest on a platform of reeds built by the female among dense wetland vegetation, usually 20-30 cm above the water.

She then lays 3-5 eggs between August and December (peaking in November) sitting on the nest to incubate the eggs for 25 days till they hatch.

Chicks remain in the nest for about 7 weeks between September and February, then stay with their mother to learn how to survive (feed and hide) before fledging from November to May.



**IF FOOD IS ABUNDANT...** a mother bittern won't have to leave her nest for long to find food (the eggs and chicks are at more risk from predators when their mother is not around to protect them), unfortunately bittern chicks, fledglings and adults are often found near starvation.



# MONITORING - HOW DO WE KNOW IF WE HAVE BITTERN?



BITTERN MONITORING IS USUALLY CARRIED OUT IN SPRING

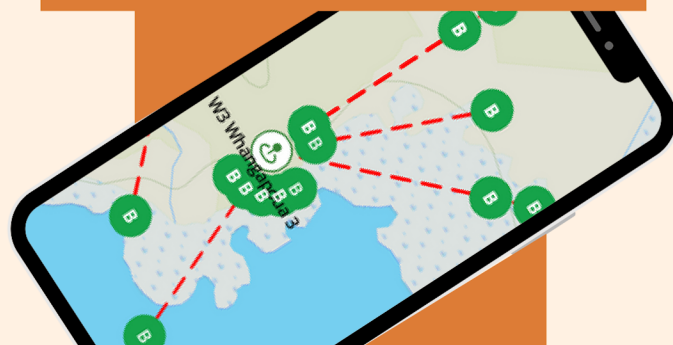
**... because this is when the males can be heard booming!**

During breeding season, male bitterns produce a sequence of distinctive 'woom' calls known as 'booms'. Each call sequence consists of several individual booms, ranging from 1-10 booms per sequence, preceded or interceded with gasps or inhalations.

These sequences are repeated at regular intervals that appear consistent to individual birds.

Monitoring typically involves people listening and recording booms or placing acoustic recording devices at sites where bittern have been seen or heard.

**FREE APP** use The Conservation Hub app to record a bittern or monitoring results. To get started download the app and join The Love Bittern! Project.



**Contact us ...** [lovebittern@gmail.com](mailto:lovebittern@gmail.com) to connect you with a regional contact or help you to learn how to monitor/record bittern at your site.



# HOW CAN WE HELP BITTERN?

## 01 PRESERVE WETLANDS

We can protect and restore wetlands and waterways by

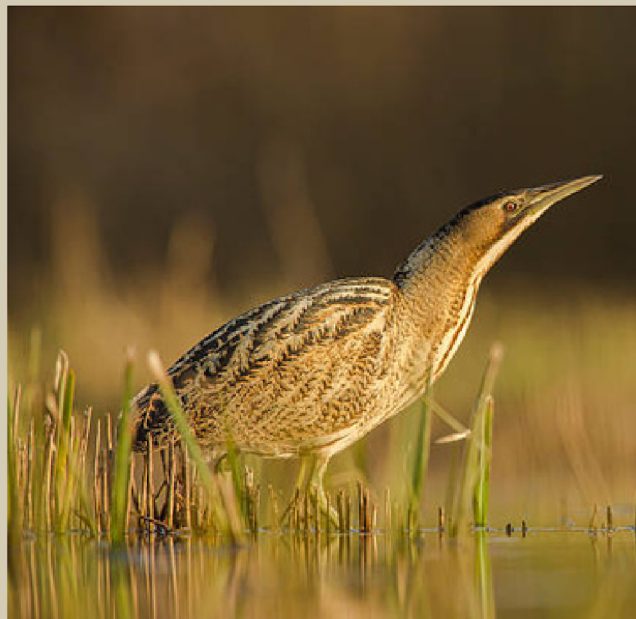
- fencing them off to exclude stock
- reduce pollutants and sedimentation
- planting out and protecting plants that provide filtration and shelter to support birds, fish etc
- stop invasive plants spreading
- getting to know your wetland by mapping and monitoring key indicators.

**Contact your local regional council for a wetland restoration guide.**



## 02 PREDATOR CONTROL

**Talk to your local regional council or predator free community group to help target mammalian predators...** such as cats, possums, mustelids (stoats, ferrets, weasels), rats and mice.



## 03 RAISE AWARENESS

**Reach out to your community, neighbours in your catchment area, schools and conservation groups** to help raise awareness for bittern

Use our media packs to help create posts on social media with subjects like -

- Have you seen or heard a bittern? (ID tool)
- Did you know bittern are on the brink of extinction? (motivation)
- Every wetland counts, especially for bittern! (help to protect)

Use our activity packs to engage children in class, at markets and events with

- colouring in pages
- word finders
- crafts

## 04 MONITOR & RECORD

**Recording bittern that are seen or heard** and regular monitoring will help us to estimate population trends. Contact us for help to connect you with a community group (or help you start one!).

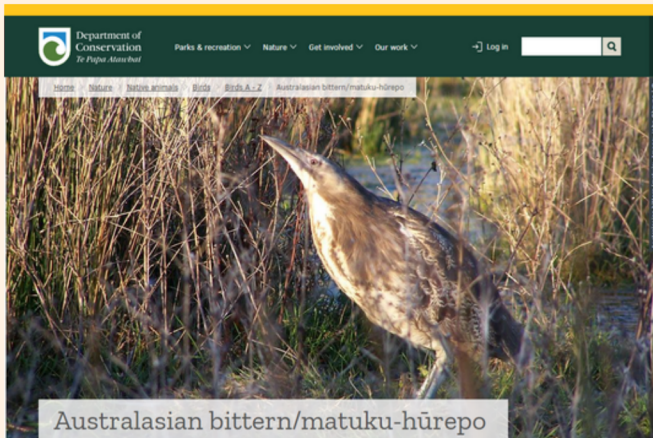
# CONTRIBUTORS & ACKNOWLEDGEMENTS

## CONTRIBUTORS

We value and recognise..

**Tamsin Hains** and **Havelock Primary School**  
for sharing your resources and enthusiasm.

The **Bittern Conservation Trust -Trustees** (pictured)  
who provided the motivation to document this  
information. (Left to right, Paul Johnson, Julian Fitter  
(Chair), John Sumich, Wendy Ambury (Secretary /  
Treasurer), Alex Flavell-Johnson - ABSENT Lawrie  
Donald, Peter Langlands)



## DEPARTMENT OF CONSERVATION

<https://www.doc.govt.nz/nature/native-animals/birds/birds-a-z/australasian-bittern-matuku-hurepo/>

Information gleaned from Department of Conservation website, protocols for monitoring and presentations from leading researchers.

## NEW ZEALAND BIRDS ONLINE <https://nzbirdsonline.org.nz/species/australasian-bittern>

Species related information and images found on NZ Birds Online website.



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