



## How to make drains

# BITTERN FRIENDLY



**Australasian Bittern** are one of New Zealand's most threatened native wetland birds and they are on a direct pathway to extinction.

They have many challenges including predation, loss of wetland habitat and being killed on our roads.

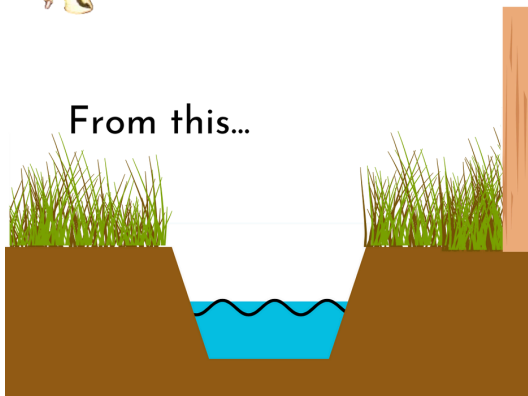
A big issue is starvation. Bittern can't access the water in steep-sided drains to hunt eels and fish there.



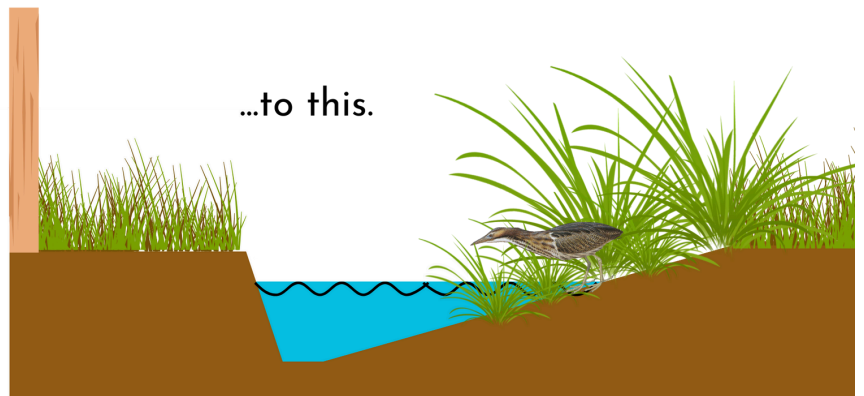
**Bittern can only catch small to medium sized prey**

Here is how you can help

**Rebatter steep-sided drains with slopes to provide access to food for bitterns.**



From this...



...to this.

### Choose a drain

- close to wetlands and estuaries with rushland and away from roads.
- with steep bank heights of 0.5m - 1.0m
- you can start with just a 2m section of the drain near vegetation that is overhanging the water - this is where eels and fish like to hide.
- make sure there is open fish passage to and from the sea (i.e. no weirs or culvert drop offs that stop fish). This is important to ensure fish migration.



### Create access

- check with your local council before you dig.
- bittern need clear shallow (15-25cm) water to see and stalk their prey, so an angled ramp into a drain will allow for changing water levels.
- dig a gentle pathway into the water in either small sections with a shovel or larger areas with a digger. Seed or plant large areas of bare ground.



**Bitterns freeze as a response to predators. This obviously doesn't work with dogs, so please control your dogs where there may be bittern present.**

### When clearing drains..

- avoid clearing drains between September - March when food supply is most important for feeding chicks and whitebait are spawning.
- leave some floating vegetation for fish to hide under and try to leave some vegetation on the north side of the drain to provide shade.
- when drains are cleared with a digger bucket, feathering the load out near the drain edge will allow any eels or fish a chance to escape back into the water - someone assisting fish back would be great too!

**Wetland restoration is ultimately what bittern need, contact us for help!**



**www.lovebittern.com**  
**lovebittern@gmail.com**