



Bittern male boom monitoring using recorders

Acoustic or Automatic recording devices can help confirm presence/absence of male bittern by recording for booms.

These devices from DOC Electronics will soon be superceded with AI software and autonomous hardware that sends a notification back to our phone or web app to tell us we have a bittern booming!

They are the best we've got for now and require manual analysis afterwards...we'll run some workshops in the first quarter of each year to walk you through this.

Monitoring using recording devices gives us limited information, they aren't as good as people that can tell us the direction of the boom (and better estimate the number of individual males) but with directional microphones coming onboard soon we might just be able to get more accuracy!

When to record

Put devices out in

- **Spring**, September to November are the peak booming times for Bittern.
- **90mins before your local Sunrise** for 2hrs and **30mins before your local Sunset** for 2hrs.

These are the peak booming times. Male bittern boom anytime of the day or night, throughout the year...they're just more reliable in spring before dawn and after dusk when they are (hopefully) holding breeding territory!

Where to place devices

Target the device to be within 1km of breeding habitat, which has

- Water over pref 50cm deep, that is
- Stable, without huge water level fluctuations, and has
- Vast areas of dense, emergent vegetation like Raupo, Kuta, Kapuawhanga, Oioi - or other reeds, rushes, sedges!

Spread devices around a wetland complex, around 500m apart to begin with. After reviewing your results you can then decide on more permanent spots that give you the best range and don't overlap too much (we can help assess this for you after year 1)

Place the device **about head height** 1.5-2m above the ground **on a skinny tree or fence baton**, where there is low rustle, lapping or other noise disturbance and the microphone has a better chance of 360 deg recording.

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Ask your Regional council, local doc office or bat or kiwi crazy teams as they may have some you can borrow!

For official DOC guidelines and how to set the devices see [monitoring protocol here](#)

Email us for more information or to register for an online workshop for sound analysis:
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