

Onboard camera field trial Evaluation summary

Field trial overview

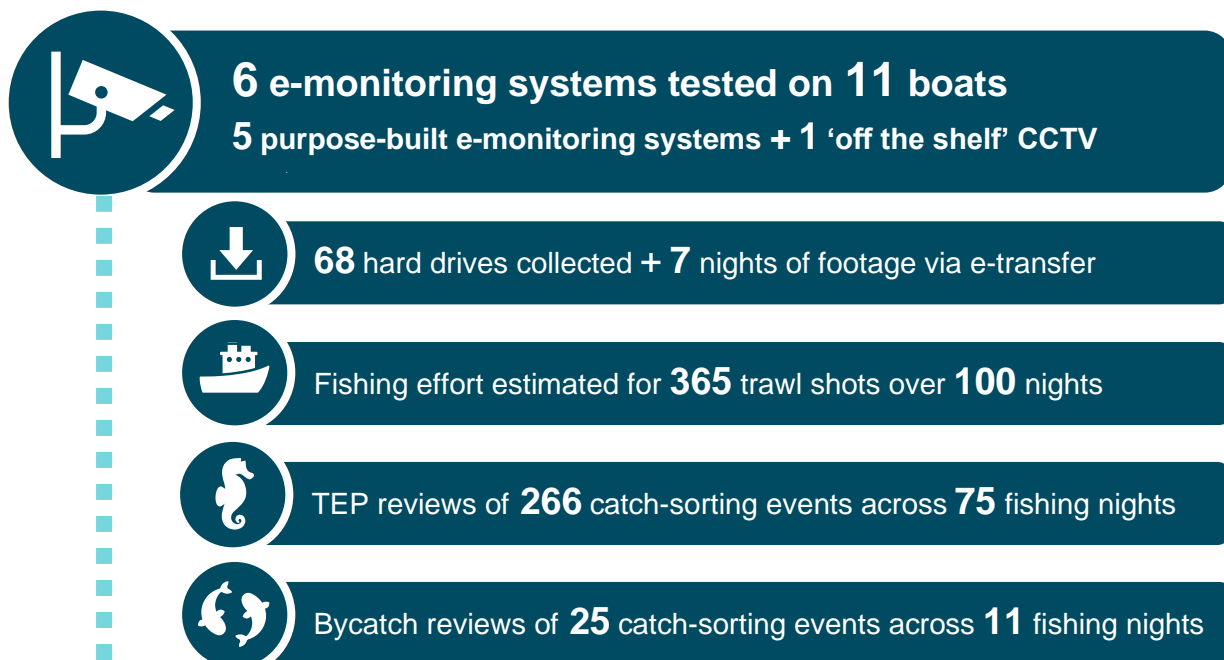
The trawl fishery onboard camera field trial was conducted over 18 months and concluded in December 2024. The trial was undertaken on volunteer vessels operating in the east coast otter trawl and fin fish trawl fisheries. Electronic monitoring (e-monitoring) systems were installed onboard vessels, including cameras, control units and various sensors. Video footage was recorded during at-sea fishing operations and sent to an independent reviewer to record catch and effort observations and compare these records with logbook information.

Fully funded and administered by the Australian and Queensland governments, the objectives of the field trial were to:

- assess the usefulness, functionality and reliability of e-monitoring footage and data to independently monitor bycatch and threatened, endangered and protected (TEP) species interactions
- identify challenges, opportunities and costs of installation and maintenance of e-monitoring systems
- assess suitability, functionality and ease of use of e-monitoring software to manage video files and review video footage and data
- assess methods of transferring video footage from vessels
- develop processes and procedures for reviewing video footage.

Field trial participants were part of a technical focus group throughout the trial and included in the evaluation process, providing input into the recommendations of the final evaluation report.

Evaluation metrics





Results

- The trial showed that larger threatened, endangered and protected (TEP) animals, such as sea snakes, were easily detected by reviewers monitoring footage recorded by the onboard camera systems.
- Smaller TEP animals, such as pipefish and seahorses, could not be detected by the cameras reliably.
- The ability of the systems to monitor bycatch varied, depending on the:
 - volume, size and diversity of bycatch
 - set up of the vessel (it was much easier to accurately review bycatch on conveyor vessels than on sorting table vessels)
 - positioning and footage quality of the camera.
- The performance and reliability of e-monitoring systems varied. Support from skippers and crew was essential to determine camera placement as well as cleaning of camera lenses during fishing operations.
- The trial identified the need for widespread technical support under any future program, and highlighted the importance of education on how to use and operate the systems.

Recommendations

- Future IOM program objectives should focus on using e-monitoring systems to monitor and validate TEP species interactions across all sectors of the ECOTF and CFFTF.
- Bycatch monitoring using e-monitoring systems should be targeted to sectors where bycatch diversity and volume is low and used in conjunction with other monitoring methods.
- Increased support and resourcing will be required during the 'bedding in' period of a future program and a risk-based, staged implementation is recommended across a large fleet of vessels (such as the east coast otter trawl fishery).
- Any future program should prioritise the electronic transfer of video footage and data over the physical delivery of hard drives and should involve electronic reporting of commercial fishing logbook data to support a review program that is timely and responsive.
- While trialling multiple e-monitoring systems proved highly valuable in testing relative strengths and weaknesses, the outcomes suggest that having a large number of e-monitoring providers involved would complicate a larger rollout.
- Extensive and ongoing engagement between industry, Fisheries Queensland and e-monitoring providers will be essential to support the effective establishment and ongoing delivery of a future program.

Next steps

We will be consulting with industry during 2025 to determine how and when to roll out onboard camera systems to the trawl fishery.

