As the Department of Conservation launches a research plan to fit two New Zealand species of endangered dolphins with satellite transmitters, environmental groups say they are horrified at the proposal, claiming it is inhumane, invasive and unnecessary. **Amanda Hurley** reports.

Dolphin spies

PLANS to tag Maui's and Hector's dolphins with satellite transmitters have sent shudders through animal rights and wildlife organisations throughout the country. The method, which involves drilling four holes through the dolphin's dorsal fin to attach a 50-gram device, is considered intrusive and of potentially damaging to two of the world's most endangered marine mammals.

According to the Department of Conservation, however, it is necessary to help researchers discover how far offshore New Zealand's dolphins swim and whether set net bans and marine sanctuaries need to be widened.

At issue is the survival of the tiny Maui's dolphin, which number, at the most, 150 and about which comparatively little is known. By attaching transmitters, says DOC Auckland conservator Rob McCallum, scientists can gain valuable information about population, distribution and zoning.

"What we're saying is that if you need to develop the full picture, you need every piece of the jigsaw," Mr McCallum says. "We're determined that the management of the world's most endangered dolphin be based on good scientific techniques."

The need for further information is not disputed. In fact, Barry Weeber, a senior researcher for the Royal Forest and Bird Protection Society, says it is vitally important more research is done. His concern is at what cost that information is gained. Animals have been harmed by satellite tagging in other parts of the world and Mr Weeber says he is loathe to see the same happen in New Zealand, especially when the subject is an endangered species.

He says the stress a dolphin endures when it is snared and brought on to a boat is unnecessary and potentially deadly. The devices, though attached with bolts that are designed to erode within three months, may cause discomfort for the animal. And he is concerned that DOC has no procedures to monitor the condition of the dolphins once the transmitters fall away.

"We've been looking at this proposal and we believe that there are alternatives that are more effective and that are going to be more accurate," he says. "What you could conceivably do is tag an animal that never goes outside the area, which doesn't tell you where the other animals are."

DOC was due to test the transmitters last month on a group of three Banks Peninsula Hector's dolphins, but bad weather delayed the trial. The species, which numbers about 800, is also endangered. But DOC says that to gain an insight into whether the satellite technology is viable for Maui's dolphins, a control is needed on animals of similar size, weight and habits.

Otago University lecturer Liz Slooten, who has studied Hector's dolphins for 20 years, says she is appalled the species has been chosen for the trial.

She says the group living at Bank's Peninsula needs to be protected, not monitored with an invasive technique such as satellite tagging. "It's basically a can of worms in terms of scientific procedure and animal welfare problems," she says. "It's not necessary and there are alternative research methods that provide better science."

Rare breed: A Hector's dolphin off the Timar identified as a subspecies, with numbers down

Up to four holes are drilled into the dolphin's dorsal fin, through which the transmitter is attached, using surgical nylon pins and held together with a metal bolt. Medical tests are done at the same time, including ultrasounds to detect pregnancy. The process takes about half an hour before the dolphin is returned to the sea. The animal is then monitored by satellite for about three months till the bolt rusts away and the transmitter falls off.

Dr Slooten says that in other part of the world, dolphins have been found with devices that have only partially detached and have caused damage to the dorsal fin.

Satellite technology has also been criticised as an inexact monitoring method. As a satellite passes overhead, up to 30 times a day, it takes a fix from the animal's transmitter. However, the reading can be taken only while the satellite is above the transmitter and the device is above water.

DOC's Rob McCallum acknowledges the