Techniques to capture and radio-tag marbled murrelets--preliminary results.

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Fieldwork was conducted in Kelp Bay, Baranof Island in southeast Alaska from 7 May to 15 June 1983. Eight marbled murrelets were captured using a net gun from a Zodiac raft. Captured murrelets were measured, banded, and fitted with 10-gm radio transmitters using 3 attachment techniques, backpack straps, sutures, and implantation. A widely used avian anaesthetic, ketamin, was used to sedate murrelets for surgery. Murrelets were sensitive to handling, required a high drug dosage to obtain the desired sedation, and had a long recovery period. Transmitters attached by backpack had a 4-4.8 km range, ground to ground. Implanted transmitters had a range of 0-1.2 km, depending on placement in the abdominal cavity. Radio-tagged murrelets moved 0.8-9.6 km. Unusual behavior by radio-tagged murrelets provoked attacks by bald eagles.