

APPENDIX 2

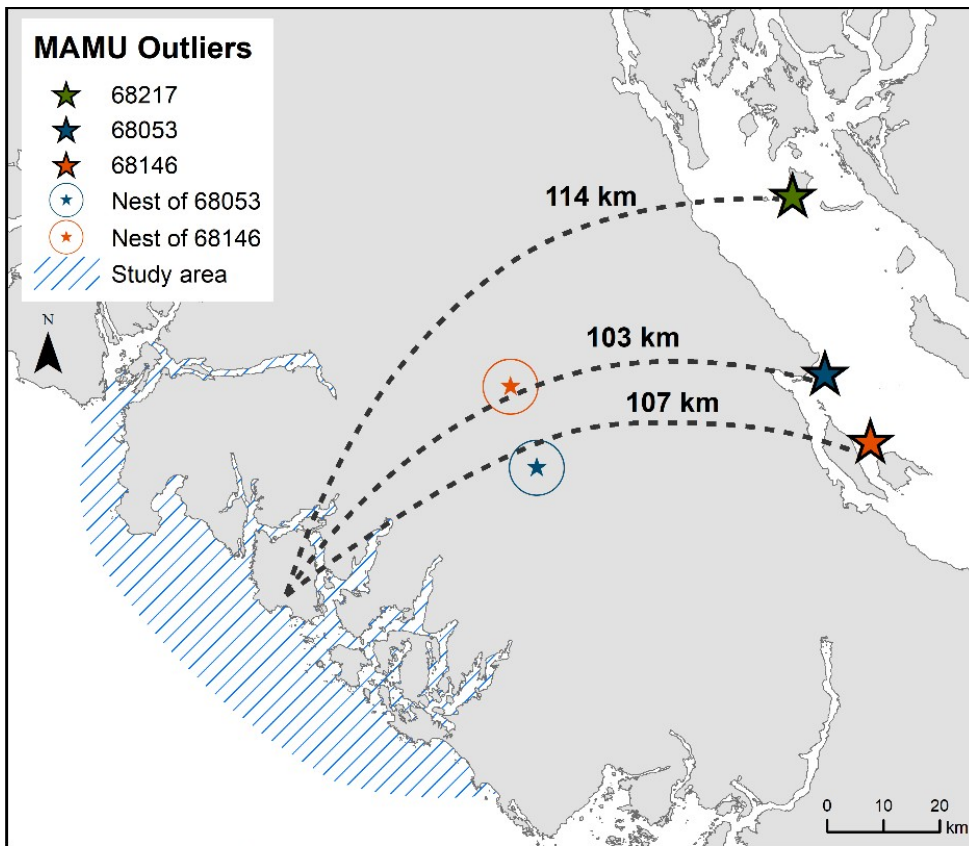
Title: The Influence of Breeding Status and Nest Site Locations on Marine Habitat Use by  
Marbled Murrelets

**Table A1**  
**Parameter estimates for the Post-hoc model predicting spatial overlap (Volume of Intersection) of**  
**Marbled Murrelets (*Brachyramphus marmoratus*) classified by breeding status and study site,**  
**excluding breeding individuals with unknown nest locations**

Dependent Variable	Predictors	Estimate	SE	Lower 95% CI	Upper 95% CI	P value
Spatial overlap	Intercept	0.21	0.24	-0.25	0.69	0.036
	Status[nonbreeding]	-0.44	0.07	-0.59	-0.29	<b>&lt;0.001</b>
	Site[DS]	-0.81	0.81	-0.99	-0.64	<b>&lt;0.001</b>
	Status*Site[DS]	0.04	0.10	-0.15	0.24	0.68

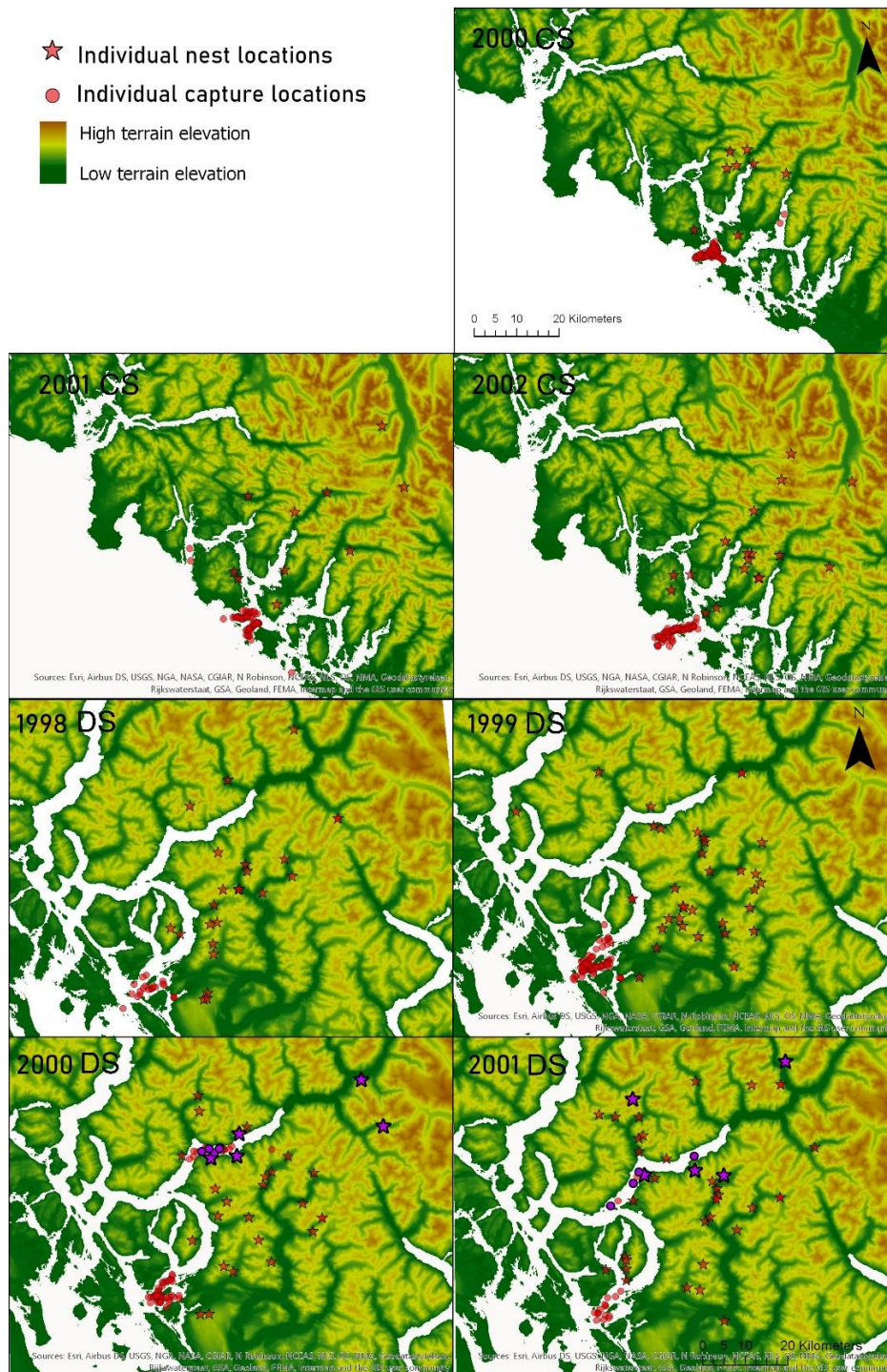
**Table A2**  
**Mean (km) and range of annual commuting distances between marine home ranges and nest sites of Marbled Murrelets**  
**(*Brachyramphus marmoratus*) at Clayoquot Sound and Desolation Sound. Commuting distance for an individual was**  
**calculated by averaging the shortest linear distance of relocations recorded on the water to the nest site**

Year	Clayoquot Sound			Desolation Sound		
	Commuting distance	range	n	Commuting distance	range	n
1998	-	-	-	35.97	14.12-75.43	10
1999	-	-	-	33.59	14.41-55.87	32
2000	17.22	5.71-27.20	8	35.47	9.84-65.59	29
2001	21.25	7.30-48.24	9	35.14	9.32-67.53	28
2002	20.87	4.43-48.68	15	-	-	-



Data source: Centre for Wildlife Ecology, SFU. Created using ESRI ArcMap v10.5.1. Coordinates: NAD 1983 UTM Zone 10N.

**Fig. A1.** Locations of 3 tagged Marbled Murrelet (MAMU) individuals, originally captured in Clayoquot Sound (CS) 2001, relocated in the Strait of Georgia that same summer. Distances measured by taking the planar distance from centroid in the CS study area to relocation points. Two birds were breeders (68053 & 68146) and one non-breeding (68217).



**Fig. A2.** Capture locations of individual radio-tagged Marbled Murrelets at Clayoquot Sound (CS, 2000-2002) and Desolation Sound (DS, 1998-2001). Capture locations are indicated as circles and known nesting sites of the tagged individuals indicated with the star symbol. Not all birds captured were of breeding status or had known nesting sites. At DS, birds captured in Toba Inlet, with known nesting sites, are indicated in purple.