

WASHINGTON MARBLED MURRELET FOREST SURVEY FORM

Survey Visit to Protocol

Page 1 of

(Y or N, initials):

Total Detections:

Species of Concern (circle one, details on last pg.): **Y** or **N**

Month Day Year

Area Name: Site Name / Number: Station Number:

Station Location - **T** **N**, **R** (circle one) **E** or **W**, **S** , **QQ (1/16)** , of **Q (1/4)**

UTM zone: 10 E (x) coordinate: N (y) coordinate: Source: Datum: FOM:

Observer (s) Name: Initials: Affiliation: Phone: ()

Station Elevation: **Ft / M** Position on Slope (circle one): **Bottom/plain**, **Lower 1/3**, **Mid 1/3**, **Upper 1/3**, **Ridgetop**

Station Placement (circle one): **Inside**, **Outside**

Distance from Survey Site Boundary: Units of Measure for **ALL** Horizontal Distances:

Station Canopy Cover (circle one): **1** = 0 to 25%, **2** = 26 to 50%, **3** = 51 to 75%, **4** = 76 to 100%

ENVIRONMENTAL CONDITIONS:

Official **Sunrise** Time: **Table:** **Begin Survey** Time: **End Survey** Time:

Temperature at Sunrise: ° Temperature at End of Survey: ° (circle one) **C** or **F** revised: 2 / 2000

TIME	VERTICAL VIEWING			HORIZ. VIS. TO 100 M	AUDIBILITY TO 200 M	PRECIPITATION			WIND	NOISE	NOTES
	CEILING	CLOUD COVER	VISIBILITY TO 2 CANOPY			RAIN	FOG	OTHER			

Ceiling: UL = Unlimited (clear), HI =>2.0 canopy height, MID =>1.25 to <= 2.0 canopy height, LO = <=1.25 canopy height, U = Unknown.
Cloud Cover: 0 = 0%, 1 = 33%, 2 = 66%, 3 = 100%.
Vertical Visibility: N = Impaired (detections may be missed due to conditions), Y = Unimpaired (conditions allow for reliable detection), U = Unknown.
Horizontal Visibility: N = Impaired (detections may be missed due to conditions), Y = Unimpaired (conditions allow for reliable detection), U = Unknown.
Audibility: N = Impaired (detections may be missed due to conditions), Y = Unimpaired (conditions allow for reliable detection).
Precipitation - Rain & Fog: N = None, L = Light, M = Moderate, H = Heavy. **Other:** H = Hail, S = Snow. Indicate intensity using same codes for rain & fog.
Wind: 0 = <1 mph (calm), 1 = 1-3 mph (leaves barely move), 2 = 4-7 mph (leaves rustle, sm. twigs move), 3 = 8-12 mph (leaves & sm. twigs in constant motion), 4 = 13-18 mph (sm. branches move), 5 = 19-24 mph (lg. branches & sm. trees start to sway), 6 = 25-31 mph (lg. branches in constant motion), 7 = 32-38 mph (whole trees move), 8 = 39-46 mph (twigs & sm. branches break).
Noise: N = None, A = Aircraft, B = Bird song/calls, C = Creek/water drainage, M = Machinery, P = Rain/hail, T = Tree drip, V = Vehicle, W = Wind, O = Other (explain in Notes).

Occurrence No. <u> </u>	Data Point No. <u> </u>	Sequence No. <u> </u>	Reference No. <u> </u>
Quad. Code <u> </u>	Photo Code <u> </u>	General Location <u> </u>	
Data Entry Initials <u> </u>	Data Entry Date <u> </u>	Data QC Initials <u> </u>	Data QC Date <u> </u>
Protocol Review Initials <u> </u>	Review Date <u> </u>	Highest Biological Status <u> </u>	

** WDFW DATABASE USE ONLY **

WASHINGTON MARBLED MURRELET FOREST SURVEY FORM

Detections - This Side Page Total: _____ Pg. ____ of ____

Area Name: _____

Observer (s) Initials: _____

Month _____ Day _____ Year _____

Site Name / No: _____

Data Reference Number: _____

Units of Measure (circle one): **U.S.** / **Metric**

Station Number: _____

SURVEY ACTIVITY:

Note Significant Weather Changes on Page 1

revised: 2 / 2000

STATUS - I/O	DETECTION #	DETECTON TIME	INITIAL DETECTION DIRECTION	TYPE	AUDITORY					# BIRDS SEEN	BEHAVIOR	INITIAL FLIGHT DIRECTION	BIRD HEIGHT SEEN Canopy= 1.0	CLOSEST DIST. TO BIRDS SEEN (units)	DEPART FLIGHT DIRECTION	FINAL DETECTION DIRECTION	NOTES Heard Only Dist. To Birds (L= Loud, M= Moderate, F= Faint)
					VOCAL SERIES			OTHER									
					Start	End	#	OL	W/J								

TYPE: H = Heard Only (no visual), S = Seen Only (silent), B = Both Seen and Heard.

AUDITORY - Vocal Series (Vocalizations): K = KEER calls, G = Groan (alternate) calls, O = Whistle or Soft Que calls, U = Unknown, --- = None or N/A. Indicate the vocal type heard at both the start and end if calls grade between different types during the detection. Indicate the number heard 1-5 or M = Multiple. OL = Overlapping Vocalizations (Y or N).

AUDITORY - Other (Non-Vocal Sounds): W = Wing Sound, J = Jet Sound, --- = None or N/A. If both are heard write W / J.

BEHAVIOR: F = Flight Over Canopy, C = Circle Over Canopy, T = Fly-Through At or Below Canopy (≤ 1.0), B = Circle At or Below Canopy (≤ 1.0), L = Seen Landing in or Departing From a Tree, S = Stationary Calling (fixed-point multiple calls <100 m), U = Unknown. **(Check Reverse Side When Using 2-Sided Forms)**

STATUS - I/O	DETECTION #	DETECTON TIME	INITIAL DETECTION DIRECTION	TYPE	AUDITORY					# BIRDS SEEN	BEHAVIOR	INITIAL FLIGHT DIRECTION	BIRD HEIGHT SEEN Canopy= 1.0	CLOSEST DIST. TO BIRDS SEEN () units	DEPART FLIGHT DIRECTION	FINAL DETECTION DIRECTION	NOTES Heard Only Dist. To Birds (L= Loud, M= Moderate, F= Faint)
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BEHAVIOR: F = Flight Over Canopy, C = Circle Over Canopy, T = Fly-Through At or Below Canopy (\leq 1.0), B = Circle At or Below Canopy (\leq 1.0), L = Seen Landing in or Departing From a Tree, S = Stationary Calling (fixed-point multiple calls <100 m), U = Unknown.