STATION INFORMATION FORM INSTRUCTIONS

The Station Information Form should be completed by the persons establishing stations on the ground prior to initiating surveys. Individuals establishing stations should be trained murrelet surveyors and should be trained and skilled in estimating horizontal and vertical distances and in estimating canopy cover. Laser rangefinders may be used for measuring heights and distances. Densiometers are useful for measuring canopy cover. For guidance with station-placement strategies refer to the protocol section *Survey Stations and their Placement* in Chapter 2 of the protocol.

1 Date: Date station was established or evaluated in the field Use 2 digits for Month and Day, and four digits for Year (e.g., May 10, 2000 = 05/ 10/ 2000).

2 Name: First name, middle initial, and last name of the observer

3 Initials: Legible initials of observer's full name

4 Affiliation: Agency, tribe, or company name

5 Phone: Agency, tribe, or company telephone number including area code. This should be a contact that can be reached during and after the survey season in the event that questions arise.

6 State/Province: Circle the appropriate state or province

7 Area Name: Name of survey area

8 Stratum Name / Number: Enter the name or number of the survey stratum. Each survey stratum must have a ***unique*** number or alphanumeric identifier.

9 Station ID: Station ID (number, letter, etc.). Each survey station must have a ***unique*** alphanumeric identifier relative to a survey stratum.

10 Station Location:
UTM - Enter the UTM zone, and coordinates and map datum (e.g., NAD83) from a USGS or equivalent topographic map. Indicate the source used to determine the station location (e.g., type of map or GPS). If a GPS is used, indicate the accuracy or error value (FOM) when the position was taken, ***and*** what map datum (e.g., NAD 27 CONUS, WGS 84, etc.) the unit was set for. UTM coordinates may also be acquired using a UTM grid overlay (some compasses also have these) with a USGS topographic map.

11 Station Elevation: Using GIS, a USGS topographic map, or a properly calibrated altimeter or GPS, record the station elevation. Indicate whether the value is in feet or meters and indicate the source (GPS, altimeter, etc.)

12 Position on Slope: Select the code that best describes the station's position on slope. Codes: **B** = Canyon bottom or coastal plain, **L** = Lower 1/3, **M** = Middle 1/3, **U** = Upper 1/3, **R** = Ridgetop.

- To determine the position on the slope, use a topographic map to identify the ridgetop and valley bottom elevation at 90 degrees (perpendicular) from the contour where the station is located. Then subtract the lower value from the higher, and divide by 3 to determine the position based on the station's elevation.

13 Station Placement: Circle whether survey station is located **Inside** or **Outside** the survey stratum. **Stations on the survey stratum boundary are considered Inside**.

- One station may adequately cover an area of up to 100 meters visually and up to 200 meters audibly. Station placement in dense forest with abundant understory and high overhead cover can limit visibility and mask sounds, thereby affecting the observer's ability to see and hear murrelet activity. Topography is also a factor to consider when establishing stations because rugged, steep terrain will affect the observer's range of detectability. In these situations, station density should be increased as needed to provide adequate survey coverage of the stratum being surveyed.

14 Distance from Survey Stratum Boundary: This measurement applies only to **Outside** stations. Indicate distance from the survey station to the survey stratum boundary. Stations are generally located ≤50 m (164 feet) from the edge of the survey stratum boundary.

15 Station Canopy Cover: Select (circle) the canopy cover class code that best describes overhead canopy cover at the survey station (approx. 25 m radius). Codes: 1 = 0 -25%, 2 = 26 -50%, 3 = 51 -75%, 4 = 76 - 100%. This can be derived as an ocular estimate of the area immediately adjacent (approx. 25 m radius) to the survey station, or an actual measurement using a densiometer or other device. This data can be useful in determining the view-ability from a station.
It's often easier to estimate ***openings*** in the canopy, whether making an ocular estimate or using a densiometer. The ***inverse*** value represents the amount of canopy cover. The value recorded must represent canopy ***cover***, so remember to translate openings to cover (%cover = 100% - %opening).

16 Canopy Height: Enter the height of the tallest tree within the station effective area. Indicate units of measure (feet/meters) and if height was measured or estimated (circle one).

17 Horizontal Visibility: provide an estimate of the approximate dimensions (length x width) of the canopy opening. Use ∞ (infinity) or >X (greater than x distance) for stations that are outside of the stand. For each 90-degree quadrant, enter the estimated average horizontal distance from the station to visual obstructions (i.e., trees, hillsides)