

Rufous Scrub-bird Monitoring - Barrington/Gloucester Tops

Observer Instructions

Monitoring and Marking of Transects

1. Monitoring will be carried out by walking a series of approximately 1km transects.
2. Teams of 2 or 3 observers will typically be asked to walk three to five adjacent transects, taking approximately one hour for each transect. These transects will be walked in the morning.
3. A record sheet will be provided for each one km transect.
4. Where possible survey teams will be dropped at one end of their assigned set of transects and walk to a waiting vehicle at the other end. The time of one hour for each km transect is not a rigid constraint. Forty minutes may be sufficient when no Rufous Scrub-birds are heard. More time may be required if more than one scrub-bird is heard.
5. When transects are on tracks with no vehicle access the survey team will usually need to return through the transects. In these circumstances it is recommended that the transects are walked more slowly on the outward trip (say 40 minutes/transect) and more rapidly on the return (say 20minutes/transect) to take advantage of the increased bird activity in the earlier part of the day. Scrub-birds and other birds are recorded on both the outward and inward journeys on the same record sheet. The amount of time required will vary with the number of scrub-birds located.
6. Most observers will spend between five and six hours conducting surveys each day.
7. Transects will be established along roads and walking tracks.
8. Each 1km transect will be marked at either end with yellow ribbon on both sides of the road/track. These yellow markers should not be changed unless specifically instructed by the survey organiser. Yellow markers should not be used for other purposes like identifying scrub-bird territories, because this will cause confusion in determining the transect limits.
9. GPS units should be set to WGS84 format and checked against the units of other members of the survey team. This is essential in order to identify the location of scrub-birds accurately.
10. GPS readings (WGS84 format) will be provided for the limits and centre point of the assigned transect to assist locating the end point markers.

In addition to collecting information on every Rufous Scrub-bird observation participants will be asked to list all other species observed. These records will be submitted to the Birds Australia Atlas as 500m radius surveys and teams will be asked to fill out a pink BA Atlas Sheet for every transect.

Rufous Scrub-bird records

The prime purpose of these surveys is to find all Rufous Scrub-bird territories within an area 150m either side of each transect by detecting calling birds and recording their locations. Survey teams will identify the point at which scrub-birds are calling on a diagram on the back of the record sheet along with the other information requested below. Example diagrams showing how to identify scrub-bird calling sites will be explained during the briefing.

1. Note which side of the transect the bird is calling or seen (and the direction you have walked).
2. Record the GPS coordinates on the track closest to the point of calling or observation.

3. Estimate and record the distance the bird is calling or seen from the transect point where the GPS reading was made.
4. Stay for 10 minutes at the point where the scrub-bird is recorded. Record how long the bird calls for during this time.
5. Do not go into the scrub to search for calling birds.
6. Record any other interesting aspects of the observation such as interaction with other species, species mimicked etc.
7. Record the exact time of the observation.
8. Provide this information for every scrub-bird found even when it is thought to be the same bird found on both the outward and inward walks through a transect.
9. At Gloucester Tops most of the scrub-bird territories are in open eucalypt woodland adjacent to beech forest where there is dense understorey. The record sheet asks whether the site fits this general description. Details of other types of site should be recorded (e.g. in beech forest with patchy understorey near creek).

Rufous Scrub-bird territories are typically about 1 ha in size. When territories are roughly circular in shape most of the calling comes from a focal point in the centre. For this type of territory records should span about 100m length of transect, with a variation of only 2 to 3 seconds in the GPS coordinates. Because this variation is small it is important that the GPS readings are stable to ensure accuracy. Obtaining stable readings may take some time if there is a closed canopy of trees. Many Rufous Scrub-bird territories are well separated from neighbouring territories and can be unambiguously assigned based on hearing a bird at the same point on multiple occasions. Recording a calling scrub-bird on both the outward and inward legs of a survey assists the verification procedure. However, the confirmation of a permanent breeding territory needs records in at least two months within the breeding season.

Some territories are lozenge shaped and can involve the use of two focal points for calling separated by up to 200m. When these types of territory are aligned parallel to a transect it can result in records of calling birds spanning up to 250m or one quarter of a transect and may give the impression that a cluster of territories exist in close proximity. Consequently where clustered territories appear to exist it is important to confirm that two or more birds are involved. In such cases it may be advantageous for the team to split and attempt to demonstrate the birds are calling simultaneously from more than one location.

BA Atlas Records

1. Record start and finish time for transect surveys including for the outward and inward legs when a return survey is made.
2. Wind (categories defined on record sheet). (*Temperature and humidity will be measured daily by the survey coordinators.*)
3. Number of observers
4. List of all species seen or heard.
5. Any breeding evidence.
6. The coordinates, number and sex of any Flame Robins seen.
7. The numbers of the following species; Pale-yellow Robin, Green Catbird, Regent Bowerbird, Australian Logrunner, and Paradise Riflebird.

Field record sheets will be provided for use or as a guide for data capture in notebooks and subsequent transfer to field record sheets.

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