



Bird survey method- Swamps, Rivers & Ranges

Timed area-searches and transects are two quite similar methods that are often used for surveys of birds. In both methods the observer focuses on a discrete area, usually of uniform habitat, and counts the numbers of birds of each species seen or heard along a set route (transect) or area (area-search), usually in a set period of time.

Observers also record birds observed far from the core area, or flying overhead, to help build a more complete species list for the general region. Such records can be useful, especially when they refer to wide-ranging species such as raptors or swifts. But it is important to distinguish those records from records actually in the core area of interest.

With the Swamps, Rivers & Ranges project, the sites usually run through a particular habitat (eg revegetation or natural forest). The intent is to search ~2 ha (200m x 100m) of the designated habitat, for 20 minutes recording numbers of all the species observed (heard or seen). Distant birds (offsite) can be marked x and young birds can be recorded as y. It is also very useful to record additional notes if you notice interesting things about the species, for example if birds are nesting, or gathering to feed at a particular plant species. Any extra species observed before or after the 20 minutes can be marked as "earlier" or "later". Any wild mammals observed can be record in the same way as birds.

If you find something unusual, please take field notes or photographs to help verify the record, after finishing the survey. If you find a bird you can't identify or are unsure, it may be worth spending some time after the survey to locate it and confirm or record its identity.

It is important to record basic site details about place, time and weather etc. including:

- Date and time
- Location and site number
- Weather conditions including: temperature, cloud cover, wind strength (approx.)
- Any local changes to note such as: flowering species, local disturbances.

As a guide to recording these details we have included space at the top of the SRR monitoring sheet.

Use the following rules to distinguish onsite or offsite records:

- The area to be searched, needs to be envisaged at the outset. It should be about 2 ha representing a single defined habitat. Birds seen or heard in the area are onsite, those outside are offsite. Birds close to the Imagined boundary should be counted as onsite, remembering that any bird close to the line is likely to cross it. So observers should not fret unduly about these decisions.
- Birds flying over the search area (eg flocks of ibis or other waterbirds) should generally be counted as offsite.
- However, birds that normally feed in flight (eg swallows, martins or woodswallows) or hunt for food in flight (eg birds of prey) should be considered as onsite if they are feeding or hunting directly above the search area.
- Birds seen or heard in the distance, or in a habitat that clearly differs from the defined habitat, should be recorded as offsite. If the species is of special interest, you may wish to make a note about what habitat it was using (eg farmland, wetland, etc).

Note: the method was devised as a simple method for counting bush-birds, and is now widely used for that purpose in Australia. Some references include:

Loyn, R.H. 1986. The 20 minute search - a simple method for counting forest birds. *Corella* 10: 58-60.

Hewish, M.J. & Loyn, R.H. 1989. Popularity and effectiveness of four survey methods for monitoring populations of Australian land birds. RAOU Rep. 55 : 26 pp.

Barrett, G., Silcocks, A., Barry, S., Cunningham, R. and Poulter, R. (2003). The new atlas of Australian birds. Royal Australasian Ornithologists Union, Melbourne.