



## Avian Demography Unit

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# COORDINATED WATERBIRD COUNTS (CWAC)

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## What is a CWAC site?

A potential CWAC site is any body of water, other than the oceans, which supports a significant number of birds. This definition includes natural pans, vleis, marshes, lakes, rivers, estuaries and lagoons as well as the whole gamut of manmade impoundments.

A "significant" number of birds is difficult to define in anything but arbitrary terms and has been set at approximately 500 individual waterbirds, irrespective of the number of species, which use the site for feeding and/or breeding as distinct from roosting only. The importance of the wetland is considerably enhanced if the site includes breeding colonies of waterbirds. The exclusion of sites with smaller numbers of birds is an attempt to focus attention on our more important wetlands, but can nevertheless be included for CWAC.

Although this definition of a CWAC site is fairly straight forward, there are a number of tricky categories which require further discussion:

**Man-made impoundments:** Major dams which are likely to have a very long life are worth including but many minor impoundments, particularly farm dams with earthen walls, have little long term value, even if they do temporarily support large numbers of birds.

**Estuaries:** These are very important habitats and should be given high priority. Wherever possible the area covered should correspond to the area under tidal influence and should preferably be counted when disturbance (e.g. holiday-makers) is at a minimum.

**Rivers:** Rivers can be included but obviously only defined stretches of river are manageable. Riverine sites should be kept separate from estuarine sites. Somewhat lower counts are acceptable for riverine sites.

**Very large sites:** Very large wetlands can be difficult to cover in their entirety. While it is acceptable in some cases to cover only a defined portion of such a site, particularly in the case of rivers, every effort should be made to cover as large a portion as possible. If only a small section is covered now, it will be impossible to compare results with future counts which do encompass the whole area. The problem can often be solved by increasing the size of the counting team and/or by changing the technique, e.g. from walking around the periphery to using a boat.

**Complex sites:** Sometimes sites have poorly defined boundaries or have several component areas which differ greatly in character, e.g. swamp, reedbed, open water, mudbanks, impoundment, etc. Again the emphasis is on covering the whole area or as much as possible. Clearly it is more meaningful to survey the whole of an integrated system than only an arbitrarily defined section. Where it is unavoidable, cut-off points must be clearly defined on a map and be made very clear to the counters.

**Combination of sites:** Generally there should never be any combination of counts from different discrete sites. The one exception to this rule is where several small, natural wetlands occur in close proximity and together, but not individually, support a significant number of birds. This situation is most likely to occur in the case of small pans. A defined group of pans could then be treated as one site.

**Seasonal sites:** The fact that rainfall in southern Africa is highly seasonal means that wetlands tend to change dramatically with the seasons. The fact that a wetland may dry up in the dry season or during a drought should not be seen as a reason not to register it as a CWAC site. If the site is important in the wet season it should be seen as important *per se*. (Dryness should also never be used as an excuse not to count a site.)

**Protected sites:** Protected wetlands and wetlands in reserves should be given high priority. Well preserved but unprotected natural wetlands with potential for conservation should also be given high priority.

### **Choosing sites**

If insufficient manpower makes it necessary to choose between sites, give priority to bigger over smaller, more birds over fewer, natural over manmade, protected over unprotected.

Appropriate choice of sites is one of the keys to the success of CWAC!

*James Harrison & Doug Harebottle*