

Counting Birds

Find out how scientists come up with a population consensus

By Rebecca Sweat

POSTED: March 7, 2007, 5 a.m. EST

Part of saving a bird species from going extinct includes simply finding out how many are in the wild. But just how do scientists go about it? A typical parrot count goes like this:

A map of the bird's habitat is divided up into a grid, and each field worker takes a point on the grid where he or she counts parrots. Ideally, each field worker is able to go to a high point, such as a treetop, cliff or mountaintop, to get a good view of the forest canopy. The best time to do the count is at dawn or dusk, when the parrots roost in trees rather than fly around.

"Every field worker will go to his place at the same designated time, and then just start counting the birds he sees," explained Mark Stafford of Parrots International. "Everyone has their own notebook, and they'll just start recording how many birds they see, when, what position and which direction they're flying. Then at the end of the day, everybody gets together and compares notes. If one person saw a flock of six Lear's macaws flying east of Ship Rock at 10:12, and someone else saw a flock of six Lear's macaws flying west of Ship Rock at 10:20, then we know not to count those birds twice."

Once duplicate sightings are identified, the rest of the sightings are added up to come up with a cumulative count. Sometimes it is very difficult, if not impossible, to count every bird — especially if the birds have a large range. In these situations, as with the red-fronted macaws of Bolivia, scientists might take annual counts of the number of nest sites.

"The red-fronted macaw is difficult to count because it moves together in large flocks over great distances," noted James Gilardi, Ph.D., Director of The World Parrot Trust. "So if you see a big flock, you don't know if it's the same flock you saw the week before in a totally different part of the country."

By knowing the number of nests, scientists have a good idea of how many adult birds there are and how many babies are being produced each year. This provides them with a fairly accurate estimate of what the possible rebound is for those birds, Gilardi said.