## BIRDING BY TAPE RECORDER

## Philip Martin, Yellow Springs, Ohio

Shortly before dawn on May 27th of 1972 I was standing beside a pond in Newburyport's common pastures. The rare and spectacular Purple Gallinule had been seen there only two days before, but now not a bird was in sight. Then I flipped on my portable tape recorder which broadcast the call of the Purple Gallinule over the pond. Almost immediately the bird rushed toward us, but upon approaching closely, it suddenly veered off and hid in the grass along the side of the pond. This particularly shy individual was not seen again.

Luring birds by imitating their calls is an art long practiced by hunters and more recently by bird enthusiasts, who spend long hours trying to hoot like a Barred Owl or whistle like a Screech. However, humans are not equipped to make all the sounds birds produce, and this is where portable tape recorders enter the picture.

"Tape birding" is most successful on the breeding grounds, where song is strongly related to the establishment of territory. The song of a male bird defending his territory, which is staked out just prior to breeding, is distinct from the alarm notes, flocking calls, and other bird sounds. This song is a warning to other males of the species to keep away. The song of another male inside this territory will bring the occupant rushing to drive away the intruder; a tape recorder playing the song will elicit the same response.

The way to begin tape-birding is to record a bird's call from one of the commercially available albums. The recordings prepared by the Cornell University Laboratory of Ornithology, to accompany the Peterson field guides, are good because they include a high percentage of native species. Yet, other recordings may have longer series of individual species' calls and songs.

Choose a bird and record its voice over and over, without narration and with about 10 seconds between calls, until you have roughly five minutes of uninterrupted avian vocalization. This process can be very tedious, but a long series of calls will reduce bothersome rewinding in the field. A "patch cord" that connects the phonograph directly to the tape recorder, excluding outside noise, is very helpful.

What birds should you record? Any bird that you've heard but have had a hard time seeing is worth a try. Owls are popular subjects for tape-birding, since their nocturnal habits make them especially elusive. The Screech Owl total on one western Massachusetts Christmas Count rose from seven in one year to 16 the next, because one intrepid soul got up at 2 a.m. and drove around back roads playing a tape, rousing 13 of the owls. He silenced the incredulous by calling in another bird just outside of the compiler's house! Screech Owl calls are doubly valuable, since they can be played during the day at any time of year to arouse small birds that tend to scold owls. Sometimes you will get no response, but if you hit it right, the resultant mob of birds can be astonishing! Barred Owls can also be called in with a tape, but I have had little experience and no success with Great Horneds, Long-eareds, and Saw-whets, although presumably they could be attracted too.

Tape recordings are marvelous for bringing the shy marsh-dwelling rails out into the open. If you carry a tape recorder to places such as Great Meadows National Wildlife Refuge in Concord or the Lynnfield Marshes, you will most likely be rewarded with excellent looks at Virginia Rails and Soras. The month of May is best, as is the early morning, although good results may be obtained later in the day, especially if it's cloudy. I am always delighted to see the rails picking their way through the grasses, approaching cautiously but determinedly until they are only a few feet away. They will often stop, peer about, and with their whole body quivering, answer the tape with a surprisingly loud call.

As I have said, tape-birding works best with breeding birds on their territory. Hence, during the nesting season, it might be worthwhile to carry tapes of the various "specialty" birds in the areas you visit. These tapes could include Louisiana Waterthrush, and Yellow-throated Vireo at Crooked Pond, Boxford; Carolina Wren, Hooded Warbler, and White-eyed Vireo, in the Westport area; and Mourning Warbler, Olive-sided Flycatcher, and Pileated Woodpecker at Mt. Greylock in the Berkshires.

However, the possibilities do not end there. A recent issue of American Birds contained the intriguing fact that a New Hampshire enthusiast successfully called in Connecticut Warblers by tape during fall migration. Why did those non-territorial birds respond in the same manner as the Gallinule? Perhaps ornithologists can use tapes to establish the

size of an individual bird's territory by determining how far it will range to defend its domain. Although we have ample evidence of the decline of the diurnal raptors, population information on owls is lacking. Perhaps census routes could be established. Observers might use the same technique as in the Christmas Count, recording the number of owls heard or seen year after year.

I must admit to a vague uneasiness over the use of modern hardware to exploit birds' natural instincts. In a way, it is almost as unsporting as hunting polar bears from a helicopter. Indeed, I have heard speculation that repeated exposure to taped calls, such as is endured by Louisiana Waterthrushes at Crooked Pond, may cause disruption of their nesting cycle. I hope this is not the case, for I would have to give up tape-birding. In fact, I wish to explore further this aspect of birding, which has given me so much pleasure and probably has even further potential.

## MASSACHUSETTS BREEDING BIRD ATLAS 1974-1978

This year, Massachusetts Audubon and the Massachusetts Division of Fisheries and Game have launched a five-year program to map the breeding distribution of each bird nesting within the Commonwealth. The program is modelled on one that was successfully completed in Great Britain in 1972 and will rely on volunteer naturalists and outdoors people to gather the data. Each participant will be assigned a certain 10-square-mile "block" for coverage -- where possible, a "block" in which he lives or works. The total amount of time that each observer must commit is difficult to estimate, but 20-30 hours of observation should suffice to confirm all of the "easier" species. Although we would prefer to have the same participant(s) continue to cover a "block" for the entire five-year period, one of the advantages of this project is that one observer can take over for another without difficulty.

This project will provide the first complete set of detailed maps of breeding distribution available for any state. We are convinced that it will be extremely useful to those preparing statements on the effects of proposed land uses in the Commonwealth, and the Atlas should be an invaluable document enabling us to study more precisely those factors affecting a species' distribution.

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