

ON THE NETTING OF CERTAIN FINCHES  
by Curtis S. Adkisson

Among the potentially most interesting birds to banders in Eastern North America, because of their erratic wanderings and massive movements (irruptions) are the cardueline finches (sub-family Carduelinae). Issues of "American Birds" dealing with the winter period always give considerable attention to the movements (or lack thereof) of the "winter finches".

Several species of this group are readily caught because they are frequent feeders (such as Common Redpolls, Purple and House Finches, Pine Siskins, American Goldfinches, and Evening Grosbeaks), and so we know something about their movements, longevity, and site fidelity (or infidelity) over a period of years. Other species of finches sometimes wintering in our region are much less likely to appear in numbers at feeders. Prominent among these are Red and White-winged Crossbills, and Pine Grosbeaks. Very few of these species are banded each year. The latest figures from the Bird Banding Laboratory support this statement. In 1973 the totals were: Evening Grosbeak 22,904, Pine Grosbeak 46, Purple Finch 35,608; House Finch 9,206, Red Crossbill 1,394, White-winged Crossbill 3, Common Redpoll 361, American Goldfinch 21,633, and Pine Siskin 20,880.

For several years I have been studying the behavior of captive crossbills and Pine Grosbeaks, and once had occasion to trap these and Common Redpolls for a proposed physiological study. I have also trapped American Goldfinches in all seasons for physiological studies at the University of Michigan. I believe that the methods I gradually learned could be useful to banders interested in these birds.

I used 12 meter mist nets for catching finches from the beginning, and took advantage of the remarkable gregariousness these birds exhibit in all seasons. In my earliest trapping experience in Ohio (1966), I managed to catch a White-winged Crossbill with a butterfly net. Later I placed that bird in a small cage on the ground near a mist net, and caught some of the individuals which came to the decoy from nearby trees. I also found I could catch more birds by noisily running toward those which sat on the ground near the decoy. In their panic they often flew horizontally into the net instead of up into the nearest trees. Some, of course, flew parallel to the net, and would not soon, if ever, return to the decoy site.

Over the next several years, mostly in Michigan, I used this basic technique to trap more white-wings, Red Crossbills, Common Redpolls, and Pine Grosbeaks, and gradually learned to use the physical setting of the trapping site, and a tape recorder, as well as one or more decoy birds to attract and catch wild birds. Seldom was I forced to go into the field without a decoy, and on these occasions I used a monofilament noose on the end of a fly rod to catch, in one case a low-feeding Pine Grosbeak, in the other a low-feeding Red Crossbill. On another occasion I used an American Goldfinch to trap my first Common Redpolls. I have found the best netting technique to be as follows: Using one or two nets, make an L-shaped

structure. It is easy for one person to "bend" a 12-meter net around a third net pole to form the "L". Place the caged decoy inside the "L" near the bend. It is best if the net and bird are placed so that the bander can sit unseen in thick vegetation nearby, although these finches are often so inexperienced that a person can sit in full view and still catch birds. Ideally the net should be placed so that a bird near the ground or in nearby trees will not see the net due to dark backgrounds, as shown in Fig. 1. Many woodland clearings and old fields fit this description. The arrangement of net, decoy, and vegetation shown in Fig 1 is such that a wild bird, upon hearing the calling decoy, perches in the top of a nearby tree, gradually comes closer, and when the decoy is in view, flies directly to the cage, or most often, to a bush a meter or two from the decoy. It is important that there be a shrub or small tree near the decoy. If this hypothetical bird is not already in the net, (it may have overflown the net or approached from the observer's rear) it will likely be inside the arms of the "L" formed by the net. Only at this point will the bander have to work, by rushing toward the bird, waving and shouting. The bird or birds will fly horizontally away from the "monster" into the net, and in most cases even in the absence of background vegetation.

Recently (July 1975) I netted Pine Grosbeaks in Colorado, and caught 15 of the 16 birds that hit the net, my best percentage yet.

There are several possible variations of this trapping technique. If the bander has no time to sit and watch the net, checking at quarter- or half-hour intervals would still yield birds, especially if the "L" were made into a triangle with a second, shorter net. In either case my success has depended on an active, calling decoy. I find that sometimes the decoy ceases calling, even when a distant bird is becoming interested. Thus I always keep appropriate calls in a cassette recorder to prompt wild birds further. Occasionally, I have even made a bird come to me, instead of the decoy!

Such events make me believe that a remote speaker near a plastic or mounted bird would also be effective, especially if the fake decoy were made to move slightly.

Still another possible variation, suggested to me by H.B. Tor-doff, University of Minnesota, might be effective where snow cover is long lasting. All these finches come to roads to eat salt and grit, and away from plowed roads would be attracted to "salt and grit stations" cleared of snow and laced with mist nets.

Since most of the above methods involve keeping migratory birds in captivity, federal and state permits are required (except when kept less than 24 hours). In the event enforcement agencies refuse a permit request, I suggest still another possibility: a canary or European Goldfinch (if available from bird dealers) suitably dabbed with non-toxic dyes to resemble a native species. Domestic canaries vary in size and color and above all, are cardueline themselves. Of course, there's the question if canaries are able to withstand the elements of winter. The phenomenon of interspecific attraction in cardueline finches could aid the bander in this case. After all, closely related species in this group have certain very similar

calls or physical appearance. I have caught Common Redpolls with an American Goldfinch and vice versa, Pine Siskins with each of these, and Red Crossbills with white-wings. (I have also caught Northern Shrikes, but that is a different matter altogether!)

I have not yet attempted to catch these finches for banding per se. So far I have needed limited numbers of any one species for behavior studies. However, in the northern tier of states and in Canada a bander could in the course of a winter (especially in an invasion year) net several hundred birds. In addition to banding and hoping for returns, much valuable data on these enigmatic birds could be gathered. I. Newton (1970: In 'Animal Populations in relation to their food resources' A. Watson, ed. Blackwell Scientific Publications, England) posed several important questions for Red Crossbills which apply to all cardueline finches: in invasions, what are the age & sex rations? Do mainly young birds irrupt? What is the physical condition of these birds at various points in their movement? Do they return to their place of origin, and when? There are partial answers for Red Crossbills in Europe, no answers for these and some other North American carduelines. I believe that motivated banders can make good contributions in this area, and I for one would lend support to those who wish to try.

--Department of Biology, Virginia Polytechnic Institute & State College, Blacksburg, Va. 24061.

\* \* \*

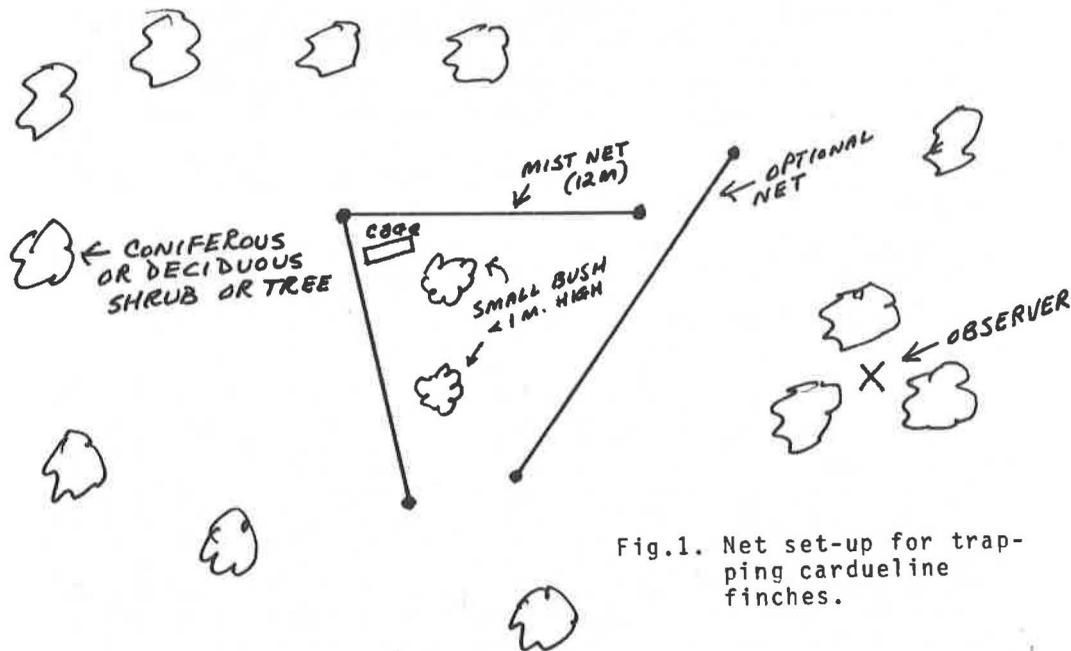


Fig. 1. Net set-up for trapping cardueline finches.