

strip treated in this way around the funnel entrance gives very desirable guard wires. Just try it.—W. I. L.

We need more information and volunteers in our Gull and Tern Banding Campaign. Have you contributed your share of information? Or can you suggest some that can? Have you tried to find a volunteer Bird Bander in your district?

BIRD BANDING — ARE BIRDS FRIGHTENED OR INJURED?

BY S. PRENTISS BALDWIN

Writing to my friends I may be pardoned if I introduce a few lines of autobiography, as it may match that of many others who enjoy birds.

My father, when I was about six years o'd, taught me an interest in birds and wild flowers. He would take me walking in the fields and woods, then in the evening, at home, he would put down on the floor, for me to play with, that fine old book of Birds, published by New York State in 1845, with its many accurate figures of birds, all beautifully hand colored. Every day of my life I have felt gratitude to that father who was wise enough to put the love of nature into me.

Later I collected birds, learned taxidermy, and made skins of them, but more and more my heart grew tender toward them until I could no longer collect, because I could not bring myself to kill them.

Perhaps that alone is answer to the question whether birds are hurt by trapping and banding, when I add that I have now for ten years or more been actively trapping and banding birds every year, and have handled, I know not how many, but at least some thirty or forty thousand birds from my traps.

But to continue the Autobiography: after years in business in the city I bought a farm, and wife and I lived on the farm each summer; and how we did enjoy the outdoor life.

One feature of the life on the farm disturbed our comfort; just as we were most enjoying the peace and beauty of nature, a bird would cry out in pain, caught by some bird enemy; today perhaps the House Sparrows break up the home life of our Bluebirds; tomorrow it is the home of our Robins destroyed by the red squirrels; constantly tragedy comes to our birds, until this sort of thing worked on my nerves, and I determined to end it.

This was ten years ago, and the change came in the life of the birds on my farm, because I became a bird bander and, finding it so interesting, I have systematically trapped and banded birds on the farm ever since then. Within the last two years several well known ornithologists have visited my farm, and each one has remarked what an extraordinary number and variety of birds I have on the place, and how tame they are. Two of these ornithologists, men of exceptional train-

ing on the subject of bird census, have said they have never seen so many birds per acre, and so many varieties per acre.

There are so many birds on the five acres about my house, and I am kept so busy trapping and banding and observing them during the nesting season from May to August, when I am chiefly doing research work with them, that I have no time to observe the birds on the rest of the farm, which contains in all one hundred acres.

BIRD ENEMIES:

Cats: I allow no cats on the place; I have no grudge against the cat, but I am raising birds not cats.

A friend of mine assures me she has a "perfectly good" cat that does not catch birds, but I would not have such a cat, it is not a healthy, normal cat; when a cat has so lost its spirit that it is no longer enjoys the sport of catching live game, and is content to eat out of a dish it is no longer much of a cat.

Red Squirrels: I do not allow them on the place. I believe them to be very destructive of eggs and young birds. Certainly the poorest nesting season in recent years on my place was a season when the place became suddenly over-run with red squirrels before I realized it; and that has not occurred since.

English Sparrow, or House Sparrow: It was trapping them that started me into operating traps and banding the native birds; and it is most evident that the very great increase of native birds on the place has been since the English Sparrow has been eliminated.

But be very sure that the person who operates your traps knows thoroughly how to distinguish the English Sparrows from the several varieties of native sparrows, for the natives are most agreeable little neighbors.

A quiet watchfulness will soon show which are the serious enemies of birds in any garden or locality; the above three have been most serious on my place.

Hawks: The Cooper and Sharp-shinned Hawks are destructive where they occur; the large hawks sailing high overhead are not destructive varieties; but these two smaller varieties come sailing so quickly through the trees, they may do considerable damage before you realize what is going on.

Blue Jays, Crows, Blackbirds: In some places these are said to destroy nests and eggs of other birds, but they have not been sufficiently numerous to do harm for me.

I confess that in trying to protect my bird neighbors I am not much inclined to wage relentless slaughter upon every possible enemy; I mostly like to leave it to nature to work out her own ways.

Screech Owls: Usually represented by one pair on the place; and the Robins do scold at them toward dusk every night, especially when the young owls come out of the nest and scatter all over the place; but I am not yet convinced that the owls should be destroyed.

Cowbird: I do not destroy the birds, but I do remove the egg from

the nests of other birds as I find them, for after all I love the other birds best.

Shrikes: In the bird notes just out from the Biological Survey is a special order of the Department permitting bird banders to destroy shrikes. At my Thomasville, Georgia, trapping station shrikes are so numerous that it is absolutely necessary to destroy them about the traps, or they put the bird bander out of business, but near Cleveland shrikes are not abundant and seldom come near the traps.

Snakes: I do not destroy snakes; I believe them to be useful and valuable; but occasionally a snake will be found disturbing the birds, or their eggs, or young in the nest. One day when a pair of my Wrens were scolding in great excitement, I searched all about for a cat or squirrel or other cause of disturbance, but could find nothing. They continued to scold and I searched again, and after a long time discovered a tiny snake not ten inches long, coiled up in the vine, ten feet from the ground and within a foot of the wren box.

Children: The old days are gone, we hope, when children, especially boys, made it a general sport in the spring to go on campaigns to destroy nests and eggs. Most children are now taught in school to take some degree of interest in birds as useful and interesting neighbors.

But in bird banding there is the danger that children become interested in seeing and handling birds so closely, and with the best intentions they may undertake to help by removing birds from the traps, with hands not yet trained to know how to combine firmness with gentleness in handling. It is not your neighbor's little rascal, it is your own dear child that may "try to help papa" and is likely to handle birds in the traps, when you are not watching.

The bird bander, or anyone else who hopes to have many birds about, will learn to hear the warning calls and distress calls of the birds, and go at once to investigate when these calls are heard. On the question of injuries to birds in trapping and banding, I have gone into this matter of enemies, because very few birds indeed are injured in trapping except by access of these enemies to the traps; and that access need seldom occur if a careful watch is kept for the enemies.

Ten years ago little was known in this country about trapping wild birds; but we have learned more and more how to use the right traps for birds of different habit; and learned to make the traps to better protect the birds from possible injury. An injured bird is a loss, and a failure, on the part of the bird bander; the very success of the sport depends upon the liberating each bird, with a band, uninjured, and in normal, healthy condition to continue undisturbed his natural life, and to come back to the traps over and over again.

In my ten years' experience I remember, I believe, every incident when I have fatally injured a bird by my carelessness. I have not injured one to each five thousand birds handled, not so many as one to each year of trapping.

Add those that have been killed in or about the traps by natural enemies, or from any cause whatsoever, often not attributable to the

trapping in any way, and even then I save from death a hundred birds, for every one that may be lost during trapping.

Birds frightened away by trapping?

Need one ask, when it is the experience of every bird bander, that in continuous operation of the traps, most of the birds taken from the traps are "repeats" as we call them, birds that have been in before. And my records are full of cases of birds that form the trap habit, and are in the traps three, or four or five times a day; all the time in fact.

In the coming July "Auk" Doctor May will tell of "Old Peg Leg," a Thrasher, who this winter has been in the habit of going to sleep in the trap while waiting to be let out.

On this question of fright let us compare our point of view with the experience and point of view of the birds: probably few of us experience a real fright, that is a fear of immediate death or terrible injury, more than two or three times in a life time. It is a tremendous event in life; we never forget it.

But every wild bird lives a life of daily fright, and daily danger to life; a cat passes near, a hawk sails overhead, a dog comes quickly around the corner, under any bush may be a rat or snake; if a bird took it seriously whenever he escapes only by a sudden dash out of danger his nerves would not last him a month. So, as you approach the trap, a bird in the trap flutters desperately to escape; and in your hand struggles, attempting to escape; release him and likely he flies only to a bush ten feet away, and calmly adjusts his rumpled feathers, or picks at a bug, all fear dismissed at once.

All spring I visit each nesting bird on the place every day, and mark or count the eggs, or perhaps remove and photograph the young each day, the parents becoming so tame that I can almost touch them, and they do not even scold me. It is the joy of bird banding that no matter how many you handle, each bird becomes in your hand an individual, one who has a personal record with you, a personal friend.

He goes out from you to far parts of the world; not all will live to come back, but some will return to your hand another year, yes, and perhaps year after year.

Is it any wonder that the officers of Audubon Societies in many states have themselves taken up Bird Banding, and give it hearty support, and urge it to others; they see in it an agency which is so interesting that it turns the casual bird lover into a rabid enthusiast; and each trapping station becomes a haven of refuge, where birds find safety and food and water and know they can live happily.

Why, even since I started to write, only yesterday, the local club of ornithologists visited me, and wandered over my place, exclaiming, "How very many birds you have!" "Have you ever tried to count up all your nests?" "How tame they are!" And this after I have been trapping for ten years past.