LEAFLET SHOWS PROGRESS BEING MADE IN OUT-SMARTING WOOD DUCK PREDATORS

The latest ideas in wood duck nest boxes, designed to give the conservationist the upper hand in his long, running fight with wood duck predators and interlopers, are described in Wildlife Leaflet 393, prepared by the Department of the Interior from the findings of State agencies and the United States Fish and Wildlife Service.

The wood duck, a popular game bird in parts of the East and in portions of the Pacific Coast States, has been in somewhat of a plight because of the scarcity of its favorite nesting places, tree cavities. Biologists, technicians, and just plain sportsmen and birdlovers have tried to fill the void by creating artificial nest boxes, some made of wood and some of metal.

But raccoons, fox squirrels, bull snakes, rat snakes and mink have had signal success in raiding these nest boxes, especially the early models. There is one instance listed in which predators destroyed nests in 21 out of 24 boxes.

To add to the woes of the wood duck and to those who build nest boxes such things as starlings, white-footed mice and tree squirrels have pre-empted nest boxes for themselves to the exclusion of the wood duck. Even opossums have used the boxes as dens and bees have moved in and defied eviction.

Probably the raccoon has been the most predacious, pestiferous and resourceful; and against him many predator-proofing efforts have been made--now with considerable success.

First efforts at predator-proofing wood duck nest boxes were not too successful generally. The trouble was that something which was predator-proof in one place was open sesame in another.

The Illinois raccoon, for example, was thwarted when the size of the entrance to the nest box was limited to an oval three inches by four inches. The Massachusetts raccoon refused to negotiate a tunnel four by four inches in opening and 10 inches long, even though there were luscious duck eggs awaiting him.
But the Maryland 'coon was different. That slightly undersized individual slipped through the tunnel easily and fearlessly and only the larger one failed to get through the three by four opening. Then there were times when the 'coon which found himself impeded by the small opening in a wooden box merely chewed away at the boards until the opening was large enough to permit ingress and egress.

Suspending a nest box on a wire strung between two trees was merely a challenge to the raccoon which has a wire-walking technique all his own. Early efforts to stave off predation by erecting nest boxes on poles in ponds did not always deter predation. A sticky substance called "tanglefoot" applied to the trunk of a tree or a post had the tendency to discourage the fastidious 'coon but didn't stop an egg-hunting snake.

A cylindrical metal box attached to a tree by brackets was tried. When a flat-topped box was used it was noted that the squirrels often used the flat top as a "landing field" to reach the opening and get into the box; the raccoon with his long reach was often able to get a "toe hold" here and there and gain entrance. When a cone-shaped top was installed the top became a skidding ground instead of a landing field for the squirrel and he was considered conquered. But the raccoon merely anchored himself to the peak of the cone, maneuvered to the opening and pulled himself into the box. But by use of a larger cylinder, longer braces, and making sure that there were no spots which the raccoon could use for a toehold, the metal cylinder was made into a reasonably predator-proof box.

Another technique which is proving successful is the use of climb-proof metal poles in open areas. Still another is to install a cone-shaped metal guard, small end upward, around the pole, tight enough to keep a snake from getting through and with a flare wide enough to prevent a raccoon from catching hold of the rim.

The leaflet shows ways and means which State agencies and the Bureau of Sport Fisheries and Wildlife have tackled the problem of predator-proofing wood duck nest boxes. Diagrams of boxes which are proving successful, techniques for erecting the boxes and tips on how to maintain them are contained in the publication.