of the Division's magazine. He writes a column on conservation for *The Louisville Courier-Journal.*

His reputation as a genial companion and spinner of yarns almost rivals his reputation as an ornithologist. How he manages to do his daily stint as planning engineer and assistant secretary of the Commonwealth Life Insurance Company no one knows—but he does.

THE PERSECUTION OF PREDACEOUS BIRDS

Of real concern to ornithologists today should be the wanton destruction of non-game species. Although many naturalists condemn all hunting, it is clear that a great many outstanding, influential conservationists have also been avid hunters. As Aldo Leopold wrote, "that we who love geese should also love to hunt them is a paradox which puzzles logicians." Hunting as practiced on a wide scale is to be condoned if the shooter is governed by self-restraint and does not indulge in careless waste of wildlife; but not all shooting is of this type and for that reason laws and enforcement officers are necessary not only to cope with the myriad problems arising from the intense competition for the supply of wild game, but also to protect species not labelled *game.*

These laws are not uniformly enforced or enforceable. In some states hawks, owls, and fish-eating birds are shot and pole-trapped with complete disregard for law. Fox and wolf drives result in mass extermination of anything that moves. Pest control campaigns and bounty payments continue contrary to biological justification. These problems are only part of the bigger one—a disregard for the value of wildlife not considered game.

This disregard is exemplified, first, by the hunter who shoots all hawks and owls in the belief that he is protecting quail and rabbits. Selfish in his desire to increase meat for his game pocket, he is willing to barter the bare existence of one species for the anticipated increase of another, quite ignorant of the essential role all may play.

Secondly, there is the shooter in search of any live targets to lay his long-range rifle on. In recent years "souped-up" varmint rifles have become the special toy of a certain class of shooters. These rifles, delivering up to 4200 feet per second muzzle velocity, equipped with high power scopes, and otherwise designed for shooting from a rest, are ideal for those who like to find targets and destroy them from the comfort of an automobile. Unsuspicious perching hawks and other "varmints" are completely at the mercy of such shooters whose range of accuracy is up to 200 yards. When approached about the matter of hawk shooting, a few "varminter" men righteously aver that they shoot only crows and cats, or only bird hawks, but some blithely admit, "I just want to see what this gun will do."

The lack of facts and esthetics characteristic of the above two types is clearly the result of continuous propaganda by the hunting and fishing magazines. These magazines, replete with "true" stories, letters from oldtimers who "know," and the colorful broadsides of arms and ammunition manufacturers, clamor for the destruction of various non-game species—crows, magpies, jays, horned owls, goshawks, sharp-shins, and even duck hawks, plus mammals of many kinds. Thus, species which many of us like to see and watch and claim as a rightful part of our heritage are labelled by sporting magazines as vermin, and even some state conservation agencies take this attitude.

But the shooter is not the only evil—there are several worms in a bad apple. Pest hunts usually originate with good intentions. In some areas rabbits, ground squirrels, starlings, blackbirds, etc. become too abundant, causing some sort of damage. However, campaigns enlisting children under the guise of good conservation, and often sponsored by vocational agricultural leaders, county agents, and conservation officers, expose the impressionable mind of youth to the false precept that organized slaughter with "point" rewards is the answer to pest problems. This is not only a bad attempt at conservation but poor esthetics as well, and will never foster a generation of conservators of wildlife.

The conservation officer represents the state and is regarded by the public as the local authority on wildlife matters. From our experience in several states, however, the attitude of these officers toward raptors and other predators is often not in keeping with biological facts or even the laws. The public acceptance and support of laws for wildlife conservation will be no more sincere than official attitude.

Another worm in the apple is the control measures conducted around game farms and fish hatcheries. Hawks and owls lured in by easy hunting are promptly dispatched at state as well as private game farms. Fish predators likewise are summarily disposed of at hatcheries. One fish hatchery is known to pay a bounty to employees for kingfishers and herons shot. The merit of artificial rearing itself is questionable, but as long as we have the system we shall probably have its undesirable details. Should we tilt at "pole-trap windmills?"

Laws protecting hawks go unenforced in many states because it is claimed that conviction would be impossible. If so, a clear-cut need for better education at a civic level is apparent. Along the roads in Alberta the telephone poles are resplendent with hawks during the fall migration, yet few are shot for, as several farmers said, "Each hawk is worth $40.00 to the farmer." A grain farmer is in an excellent position to make this evaluation. Perhaps we could spread this simple idea more effectively.

The best way to get the teaching job done is to stimulate a public desire for the addition of conservation subjects to the lower grade curricula; but basic to this is the production of leaders. Leadership training should be available in conservation camps and normal schools to provide teachers who understand the correct use of natural resources, and who recognize the opportunities for improving the relationship between man and his environment.

State and local ornithological groups, while not usually blessed with surplus funds, could lend active support to leadership training programs through publicity in their own journals. Since the acceptance of new ideas in public education is slow at best, stop-gap measures are desirable. The publicity campaign is useful. Competent ornithologists in each state should consider a publicity campaign for the conservation of predaceous birds, particularly in those states where no *real* protection is given. Newspaper articles, radio programs, and booklets could be used to spread the word. Booklets should be free, attractive, and informative. Few such booklets are now available. Publications from Pennsylvania and Wyoming fit these specifications except that they are available for nominal prices which definitely limit distribution. A publicity program usually requires competent personnel with journalistic ability as well as financial support, but much could be done through the cooperation of interested organizations.

The education of the public is but one approach. What other chances are there for doing something positive for predaceous birds? In this era of cheap money, one wonders if there is not something to be garnered for the less-prized species. While non-game birds benefit considerably from the acquisition and development of refuge areas set aside annually with the use of Federal Aid funds, more than just a token acknowledgement is due this important segment of the bird fauna, particularly predatory species. Why not counter-balance the heavy subsidization of game investigations with some much needed research on non-game? There is danger of the present system nurturing the philosophy that conservation is *only* for game species. As Hochbaum put it, "the game manager or wildlife technician has built up a science of his own which breaks too far away from the fundamentals of biology upon which it was founded." Notwithstanding the fact that a large portion of the money comes from the sportsman's pocket, any activity that does not adhere to the principle of saving all the flora and all the fauna is not true conservation.

Nothing in the wording of the Pittman-Robertson Act indicates that Federal Aid money may not be used for the benefit of non-game species. Selection of projects appears to be a matter of choice with the states, and the emphasis upon game species was natural in the early

years of the assistance program. Despite expensive duplication of effort, states do carry on parallel research on quail, pheasants, grouse, waterfowl, deer, etc. A mountain of data is accumulated, publications are cluttered with details differing mainly in their place of origin, and the technical sessions of annual meetings still labor with the old topics. Perhaps it is now time to question whether some of the game research money being spent is really *well* spent. Would it be better spent if applied to a less intensively cultivated field of wildlife investigation, namely, predaceous birds?

With the availability of Dingell-Johnson funds the relationship of fish-eating birds to the production of game fishes assumes greater importance. The facts are none too well known. On warm water impoundments, where underfishing and stunting are the major problems, perhaps we could find a means of soliciting the help of fish predators in removing the small, unharvestable fishes. It will be extremely disheartening if the persecution of fish-eating birds is to be permitted on the water areas created or maintained with Dingell-Johnson money.

Local support for strong protection programs by the various states means a strong national program. As the local attitude is bettered the state enforcement officer's task becomes more justifiable in the public mind. On a national scale this means an easier course in conserving and perpetuating species whose fame, if not distribution, transcends state boundaries, e.g., the California Condor and the Everglade Kite. Citizens of the western states no longer will wonder what is their stake in the future of the Everglade Kite, for an awareness of the inherent values of local fauna will align them with the group that seeks to help not only a bird but man himself.—CHARLES M. KIRKPATRICK AND WILLIAM H. ELDER.

NEW LIFE MEMBER

Paul J. Nowland was born in Wilmington, Delaware in 1895 and has maintained residence there all his life. He attended Princeton for two years. During the first World War he served overseas as a member of the aviation section of the U. S. Army Signal Corps. One beautiful moonlit night in 1918, near Romsey, England, he heard his first Nightingale (*Luscinia megarhyncha*) sing. He has long been an admirer of Alexander Wilson. His love for birds and desire to protect them has focussed recently upon the Hawk Mountain Sanctuary in Pennsylvania. Our photograph of Mr. Nowland shows him standing near the entrance to this famous sanctuary—the only one of its sort in America.

The actual dates of publication of the four numbers of *The Wilson Bulletin* in 1950 were: March 27, June 29, September 20, and December 22.