

TESTIMONY OF FRANK T. KUNCIR, SUPERVISORY SPECIAL AGENT (RETIRED)
UNITED STATES FISH & WILDLIFE SERVICE, OFFICE OF LAW ENFORCEMENT

Position: Support

I am a retired criminal investigator having served in that capacity for 25 years including 14 years in Maryland on the Eastern Shore and Annapolis. I also served in that capacity in 5 other states charged with the responsibility of investigating violations of all Federal wildlife laws including the Bald & Golden Eagle Protection Act, Migratory Bird Treaty Act, Endangered Species Act & Marine Mammal Protection Act. During my career starting in 1995, I was a lead instructor at the National Conservation Training Center in Shepherdstown, WV, participating in a course entitled "Pesticide Impacts to Fish & Wildlife Resources" presented annually until 2012 both at NCTC as well as in the states of CA., CO., OR. & WA. I provided training sessions to Maryland Natural Resources Police, wildlife professionals in Virginia & California in conducting field investigations into the poisoning of trust wildlife resources protected by state and federal regulations. Until 1994 I conducted 27 pesticide misuse investigations in MD. & DE. involving hundreds of wildlife victims.

Beginning in 1985 in Virginia other FWS Agents of the FWS & biologists of the Virginia Game Commission responded to the discovery of Bald Eagles & Migratory Birds which were determined to be attributable to the chemical pesticide carbofuran (trade name Furadan) in association with its use during the planting of corn in that state. Twelve incidents with bird mortalities ranging from 1 to 200 deaths occurred up until 1990. Due to these findings and field testing & observations of bird die offs after the planting of corn, the state of Virginia initialed proceedings to ban the use of granular Furadan there.

Simultaneously, beginning in 1987 here in Maryland, the Cambridge office where I was stationed, received continuing reports of dead Bald & golden eagles as well as other migratory birds throughout Maryland which were later determined by federal forensic laboratories as being by Furadan as the cause of death. The laboratories found Furadan in high concentrations in the many victim's internal organs, on their bills and talons. Several were found in close proximity to baits in the form of chicken carcasses and sardine cans laced with both liquid and granular Furadan. Criminal investigations were initiated and cases presented in both criminal & civil arenas in what we call of "Circle of Death (1)", i.e., a number of victims of many species concentrated around a placed bait which succumb almost immediately, having fed on a poisoned bait with very high concentrations of the pesticide (some cases as much as 11% pure Furadan). From this epicenter dead victims and victims exposed to a sublethal dose range outward (one MD. incident resulted in discovery of a Snowy Owl 12 miles from the baited area. According to FWS biologists, the natural tendency of wildlife once exposed to poison is to immediately seek cover in order to avoid predation themselves often in burrows, ditches, brush and trees (2)". Although the primary victims are found at the center, the total # of victims far out numbers those discovered via simple searches, they only represent a virtual tip of the iceberg. A controlled study here in MD. found that within 24 hours after birds were found poisoned, 75% of other victims were scavenged and disappeared. Furadan itself is used "preferred by perpetrators because of its acute toxicity, the amount placed can be in excess of 8,000 times that amount needed to kill a targeted animal (3)". EPA researchers found secondary poisoning in Red-shouldered hawks in Beltsville, MD. in May 1981, "the hawks having fed on carcasses of shrews and migratory birds which ate Furadan 15G granules and died as a result. "(4)

The US Fish & Wildlife Service National Fish & Wildlife Forensics Laboratory in 2005 determined that “30.4 % of 391 wildlife victims received for cause of determinations from poisoning were attributable to Furadan exposure. “(5)

In 1989 EPA convened a Scientific Advisory Panel to consider the reregistration of Furadan. It determined that adverse effects to birds and other fauna associated with flowable carbofuran have been established in the laboratory, in the field, and in the courts. “As with granular, formulations, there are no known conditions under which flowable carbofuran can be used without resulting in unreasonable adverse effects to non-target organisms.”(6) By Dec. 2009, EPA had banned the use of all formulae of the pesticide.

With the ban however, EPA did not call for the removal of remnants and restrict possession of the banned material and no buyback program was initiated by the registrant, FMC even though it had done so in several countries in Africa where Furadan was also banned from use because of commonplace poisonings of wildlife there. In banning other poisons (Compound 1080, Strychnine,etc) proper destruction orders were in place to eliminate later use and human exposure. So, the stocks of Furadan in possession in Maryland after the EPA ban remained in their original containers or in the case of the granular pesticide, in layered <3 mil (.0003 inch) thick paper bags easily subject to deterioration over time possibly exposing innocent parties to exposure. Deteriorating exposed Furadan can impact water tables as well potentially causing unsafe levels above acceptable health standards.

Recent years have continued to reveal the misuse of Furadan for poisoning wildlife in violation of MD law. (See below) USFWS Special Agents & Maryland Natural Resources Police have, since 2016 investigated 30 Bald eagle Furadan poisonings. “Authorities say they think old stocks of the pesticide carbofuran (were) being used to kill foxes, coyotes, raccoons, and other farm pests, but it harms the eagles that scavenge on the dead animal remains (NBC 4 May 5, 2019)” or opportunistically prey on other animals poisoned by it and the birds observe them in the throes of very painful deaths. Bear in mind again, these 30 may only reflect those discovered, many others may have been impacted negatively as well not only directly but secondarily by birds returning to their nests and feeding poisoned food to their young or not returning leaving the birds to starve in the nests. Investigative reports have confirmed that search warrants served 2018 on a farm where 5 dead bald eagles and two which were still alive, both old granular bags of Furadan granular and liquid Furadan were found. “Between 2005 and 2010, studies have shown that poisoning by use of baits is a habitual, recidivist practice, indiscriminate, “the perpetrator has no control over the animal or even the person that might fall victim to it”, cruel (animals poisoned undergo anguished death throes being driven by out-of-control nerves triggering all the muscles of the body. (7)

For these reasons, allowing the continuing possession of Furadan, which cannot be used for any legitimate purpose, should not be allowed to continue. The elimination of the hazard of Furadan to Maryland’s Bald eagle population as well as all wildlife, through this potential legislation will insure the species survival and continued growth.

1920 Annotated Code of the State of MD., Title 10-410 (m): "A person may not kill, attempt to kill, or injure by poison, wildlife."

(1) *"Investigating Wildlife Poisoning Cases"* Richard K. Stroud DVM MS, Veterinary Medical Examiner and Frank Kuncir, Special Agent USFWS, LE, International Game Warden Winter 2005 p8-13

(2) *Pesticide-Laced Predator Baits: Considerations for Prosecution and Sentencing* Nimish Vyas, USGS, SA Don Patterson, USFWS, LE. Et al. The Environmental Lawyer, Volume 9, Number 3, June, 2003

3) "Pesticide Use and Toxicology in Relation to Wildlife: Organophosphorus and Carbamate Compounds, US Fish and Wildlife Service Resources Publication 170 Gregory Smith 1987

4). "Secondary Poisoning of red-shouldered hawks with carbofuran" 1983 Journal of Wildlife Management 47 :1129-1132

5) See Stroud, Kuncir (1) above

6) *Carbofuran and Wildlife Poisoning: Global Perspectives and Forensic Approaches*, First Edition. Edited by Ngaio Richards. © 2012 John Wiley & Sons, Inc. Published 2012 by John Wiley & Sons, Inc.

7) *Illegal Use of Poisoned-Baits, Legal Analysis and Investigation*, Bodega, Zugasti de la 2014 SEO/BirdLife-Proyetco project. Madrid

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