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Pesticides Again Threaten Life of Louisiana Pelicans

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NEW ORLEANS, July 6—Farm pesticides are once again threatening to destroy Louisiana's state bird, the brown pelican.

About 80 per cent of the state's flock, rebuilt from pelicans imported from Florida in recent years, have died over the last two months, the Louisiana Wildlife and Fisheries Commission said last week.

"It looks like we are down to 100 birds from a restocked population of more than 450," J. Burton Angelle, the commission director, said. "Chemical analyses indicate the presence of at least pesticides or pesticide residues in the brain tissue of the dead birds."

He identified the chemicals as endrin, dieldrin, toxaphene, DDE (a breakdown product of DDT), BHC (benzene hexachloride), HCB (chlorobenzene), PCB (polychlorinatedbiphenyls) and heptachlor enoxide.

He said the brains of all the birds tested contained lethal doses of endrin, a pesticide widely used in agriculture in the watershed of the Mississippi River.

Traced Along the River

"We have ample evidence to indicate that much of the endrin is coming down the Mississippi River from states to the north of us," Mr. Angelle said.

The commission staff is beginning to study the pesticide content of fish in the Gulf of Mexico around the mouth of the Mississippi. The pelican feeds on fish and presumably ingests the pesticides from the fish.

Richard Yancey, assistant director of the commission, said that so far only low levels of pesticides had been found in the few fish that have been studied. A pelican eats 90 to 100 fish a day, he said, which gives it a high concentration of the ingested poisons.

McFadden Duffy, information officer for the commission, said the agency's wildlife experts believed that this spring's high water on the Mississippi might have caused the heavy pelican mortality.

He explained this by noting that the pelican, like some other birds, stores fat in its body and taps this fat for energy when under stress. The authorities theorize that the stress caused by high water might have induced the pelicans to use their stored fat in which high concentrations of the pesticides have been found. By using this fat, the birds released large amounts of poison into their digestive systems.

The brown pelican grows as large as 54 inches long and has a wingspread of six and a half feet, according to Roger Tory Peterson, the ornithologist and author of "Field Guide to the Birds."

Flocks Once Large

It once lived in large flocks along the American coasts. But in the nineteen-fifties, it began to die in much of its habitat, especially in Louisiana, California and South Carolina, after farmers started using large amounts of chlorinated hydrocarbons to kill insects.

DDT, which has been banned for use in the United States but is still exported, got much of the blame for the virtual extinction of the pelican in Louisiana during the early 1960's.

State officials began restocking the birds late in that decade with pelicans imported from Florida, where pesticide runoff apparently caused less damage. The commission brought 465 birds from Florida in the years after 1969 and turned most of them loose in Barataria Bay, just west of the mouth of the Mississippi River.

The new birds reproduced enough offspring to offset natural deaths until this spring. Then the wildlife officials began to see dead birds on the beaches. When they investigated, they found that the population had been disastrously depleted.

Mr. Duffy said, "we have a man there now doing nothing but counting them, by air and by boat."

More dead birds are being found every day. Mr. Duffy said he believed most of the remaining 100 would die.

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