

Climate change has some species fleeing the Texas heat

August 20 2009, By Anna M. Tinsley

As the hot days in Texas get even hotter, it may just be too much for some birds and fish. From the American goldfinch to the gray snapper, some species have been moving north for years, searching for cooler ground.

And their quest may someday lead them to migrate out of the state -- forever -- especially if climate change continues to make Texas warmer, as predicted.

"The simple fact is, species may be migrating, shifting, because of climate changes," said Ted Hollingsworth, land [conservation](#) director for the Texas Parks and Wildlife Department. "If we want to preserve those, keep them in Texas, we need to be thinking ahead."

That's part of the state land and water plan's new science-based approach to conservation and preservation. Its overall goals are to conserve and manage natural resources and create opportunities for outdoor recreation. Earlier versions focused on other issues, such as creating more state parks around growing regions such as the Metroplex.

This year, Hollingsworth said, he and others have worked to develop a new strategy that incorporates climate change.

"We are shifting toward thinking in larger scale," Hollingsworth said. "The old plan didn't say a word about climate change."

Studies indicate that by 2100, temperatures in Texas could rise by 3 degrees in the spring and about 4 degrees in other seasons. Precipitation could drop by 5 to 30 percent in the winter, according to The Earth Institute at Columbia University.

The higher temperatures may shrink water supplies if, as predicted, most of Texas has more than 100 days a year above 100 degrees by 2100, according to a report issued last month by Global Climate Change Impacts in the United States.

Already, some areas in Texas, from grasslands to the coast, are under stress because of the heat, said Katharine Hayhoe, a research associate professor at Texas Tech University and one of the authors of the report.

The report says the heat will likely change natural systems and habitats such as prairie potholes or playa lakes, forcing some native plants and animals to other areas, potentially out of the state.

These species may move out of the state in coming decades because of climate change:

American goldfinch: In recent decades, this small seed-eating bird has moved nearly 220 miles north, and its Texas population has dropped more than 40 percent, according to an Audubon Texas State of the Birds report. At the same time, the bird's population north of Texas grew more than 80 percent.

Subtropical forest birds: Some of these birds, such as Couch's kingbird, the long-billed thrasher and the olive sparrow, tend to make their homes in brushy clearings and overgrown agricultural fields. They have gradually been reported as moving north in Texas, likely because of climate change, said Wendy Gordon, program leader of nongame and rare species at the Parks and Wildlife Department.

Red mangrove: This treelike plant with long roots, which serves as a feeding and breeding ground for fish, birds and other wildlife, appears to be moving up the Texas coast. It was typically found in tropical regions -- earlier maps showed it not far north of the Rio Grande estuary -- but now it's found more than 200 miles north, near the edge of Matagorda Bay, Gordon said.

Cedar waxwing: This berry- and insect-eating bird, which typically breeds in openly wooded areas, has migrated north by 189 miles, and its Texas population has dropped by more than 75 percent in 40 years. At the same time, the waxwing, which is attracted to the sound of running water, saw its nationwide population triple in states north of Texas, the Audubon report shows.

Gray snapper: This fish, also known as a cubera snapper, was once found only in the lower Laguna Madre in South Texas. It has steadily moved hundreds of miles north since the 1990s, and is now found near Sabine Lake, close to Port Arthur. Young snappers live inshore in mangroves and grass beds, moving offshore to coral or rocky reefs when fully grown.

American robin: This orange-breasted bird, which can be found singing early in the morning and foraging on lawns, has moved 206 miles to the north, and its Texas population has dropped 66 percent in 40 years, according to the Audubon report. As the robin turns to northern habitats for winter, it is seen north of Texas 22 percent more than in the past.

White ibis: Most of the population of this long-beaked wading bird has moved 100 miles north in four decades. Known for being attracted to both marshy wetlands and mowed grass, this bird has become somewhat more numerous in Texas. But preservationists worry that as habitats are increasingly lost because of the heat, the ibis's population will continue to drop, the Audubon report says.

The state plan's overall mission is to conserve and manage roughly 1.3 million acres, including parks and nature areas, and provide opportunities for outdoor recreation.

This year, Hollingsworth said, he and others worked to condense the plan, which had been hundreds of pages long.

"We want to be sure that anyone who has an interest in conservation and outdoor recreation has an opportunity to both hear from us and give us their thoughts on where we go from here," he said.

Some preservationists worry whether the plan covers enough.

"We are concerned that with the abbreviated format, that they've tended to omit a lot of the work with private-land owners, who own 95 percent of the land and habitat," said Kirby Brown, vice president for public policy for the San Antonio-based Texas Wildlife Association.

Brown said other concerns include a lack of attention to the effects of new renewable-energy plans on wildlife and habitation, and the breaking-up of large and small tracts across the state.

Brown also said his association hopes that the Parks and Wildlife Department will teach schoolchildren the importance of keeping natural resources in Texas.

But Brown did say that the association, which represents about 5,500 conservationists and hunters who own about 40 million acres in Texas, has seen much evidence of [climate change](#) affecting [wildlife](#) and state lands.

"We're trying to figure out how we want to approach it and what we want to do," he said.

"There have been very dramatic changes over the past 30 years."

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Citation: Climate change has some species fleeing the Texas heat (2009, August 20) retrieved 27 April 2024 from <https://phys.org/news/2009-08-climate-species-texas.html>

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