Catalyst Series Presentation

JoAnn Hackos February 2, 2020 :

Evergreen Audubon member JoAnn Hackos represented Audubon Colorado Council on a panel discussion entitled: Geese and People: Protection and Policy. The discussion was held at Denver University's Institute For Human-Animal Connection in conjunction with the Sturm College of Law's Animal Law Program. You may contact JoAnn directly at Conservation@Evergreen Audubon.org for more information about the research she has done on the topic.

Giant, non-migrating Canada geese have been nesting on the Colorado Front Range for the last 50 years. The resident geese were successfully introduced in the 1930s by our own wildlife agencies.

At the same time, we have worked diligently to remove predators and create safe environments that geese especially enjoy, namely large expanses of Kentucky bluegrass in close proximity to safe islands on the lakes in our local parks. As we have allowed lawns to proliferate, so did the geese. They don't face predators, they don't fail during migration, they're not hunted, and they reproduce at a younger age and have more goslings.

As a result, the numbers of geese have risen until they have become a people problem. But reducing their number is seldom quick or easy. The places they enjoy, which are also places people enjoy, must be modified to make them less attractive to Canada geese, or the geese you remove will be replaced with new ones.

Denver Audubon and the Audubon Colorado Council have been active in supporting a balance between the needs of wildlife and public/environmental health. We believe culling, hazing, and repellents are short-term solutions without much public support.

To quote, "A long term solution would be to convert lawns in our parks and neighborhoods to native plants, such as wildflowers, shrubs, and taller grasses, or artificial turf in playing fields. This would require giving up bluegrass lawns in our playing fields, golf courses, and grassy picnic areas for native habitats with taller grasses, shrubs, and wildflowers." As we are aware, the "community would have to be willing to make that switch."

Fortunately, we have many reasons to promote native habitats on the Front Range, reasons that will help Coloradans understand the breadth of the problem, a problem that is clearly a "people problem," not a "goose problem."

Clearly, Denver Parks and Recreation knows this, as evidenced by their own goose management plan. Denver Parks and Recreation even sponsors certifying Denver as a Community Wildlife Habitat.

Some benefits they cite are to:

- Connect people with the natural world and support local biodiversity conservation
- Reduce environmental health risks associated with urban living, and facilitate wellbeing by improving physical, mental, and emotional health
- Promote pollinators, reduce stormwater runoff, and encourage water conservation

It is absolutely crucial to get buy-in from the community for any of the techniques we might use to make our lawns and our parks less attractive to geese.

The Audubon Colorado Council, representing the Audubon chapters in the state with some 25,000 members, has voiced objections to rounding up and killing Colorado wildlife, including Canada Geese. We vigorously commented on the 2020 Environmental Assessment published by the USDA Wildlife Services.

According to the agency in 2018, its trappers and field operatives killed more than 1.5 million native animals to benefit private agriculture, big game management interests, the livestock industry, aquaculture operations, commercial fish farms, the timber industry, public lands grazers, and golf course operators. The list includes about 515,000 red-winged blackbirds, 1,300 red-tailed hawks, 19,900 mourning doves, 10,000 double-crested cormorants, 2,000 mallard ducks, hundreds of owls and herons, Canada geese, American coots, Bald and Golden eagles, not to mention thousands of mammals.

Their own research suggests other methods. The National Wildlife Research Center developed a contraceptive drug for birds, nicarbazin, which was registered with the EPA to reduce flock size of resident Canada geese in urban and suburban areas. However, Wildlife Services never used this approach to resolve conflicts with geese and instead captures and kills them when they are flightless during the annual molt, as they recently did in Denver, to the consternation of the public.

The Environmental Assessment states that the lethal removal of wildlife does not in any way irreparably harm the continued existence of these species.

Obviously, this cavalier statement was written before the article, "North America Has Lost Nearly 3 Billion Birds Since 1970" was published in the journal, *Science* (Sept. 2019). Researchers found that threatened species aren't the only birds suffering population loss. In fact, common birds—including "beloved backyard companions like sparrows and blackbirds"—are taking the biggest hit. The results of an analysis of 529 avian species revealed that: "A total of 419 native migratory species experienced a net loss of 2.5 billion individuals. More than 90 percent of the total loss can be attributed to just 12 bird families, including sparrows, warblers, blackbirds, larks, and finches... Grassland birds, such as meadowlarks and grasshopper sparrows, took the biggest hit. They've lost 700 million individuals across 31 species, equivalent to a 53 percent population loss since 1970... Industrial agriculture may present an even bigger challenge. Morrissey notes that the species disappearing most rapidly—sparrows, blackbirds, larks—are associated with agriculture."

Our best hope is to create on the Colorado Front Range and throughout the state a sustainable habitat for wild creatures as well as for ourselves.

Denver Audubon quotes Dr. Doug Tallamy in Bringing Nature Home.

"Because food for all animals starts with the energy harnessed by plants, the plants we grow in our gardens have the critical role of sustaining, directly or indirectly, all of the animals with which we share our living spaces."

In his forthcoming book, *Nature's Best Hope* (Feb 2020), Tallamy explains what happens when we have nothing but lawns.

"Lawn dominates landscapes in all but our driest ecoregions. Turfgrass has replaced diverse native plant communities across the country in more than 40 million acres, an area the size of New England, and we are adding 500 square miles of lawn to the United States each year."

All this turfgrass is especially bad in our dry, water-scarce climate. Our weed-free lawns can be quite toxic because we treat them with toxic chemicals, most of which end up in the groundwater. The amount of oxygen produced by turfgrass is a tiny fraction of native plants produce. Lawns provide no habitat for native bees or others insects that feed our native birds. They are virtual dead zones. Our lawns consume time and money.

As a scholar of 18th-century landscape gardening, I am aware of our attachment to great expanses of lawn. Wealthy landowners in Britain developed acres of grass to demonstrate how wealthy they were. They didn't need to plant crops or graze lifestock to feed their families. They could afford to add alien plants from around the world because gardens had become status symbols.

Now, two hundred years later, we are still emulating the rich and famous. Some think we are also emulating the original human landscape dominated by the short grass of the African savannahs. But isn't it time to change so that we can preserve the earth and all its creatures? We've made other changes before. Why not this one? We've decreased the amount of alcohol we drink from much higher levels in the 19th century, we avoid fur coats, we smoke less. We need the same sort of civic engagement to stop watering lawns to creating gardens that require little or no water. We call this "ecological landscape design."

And, in fact, such landscapes do not favor the overabundance of Canada geese.

We can plant native grasses, shrubs, flowers, and trees in our gardens and in our parks. Denver Parks and Recreation has a small program to do just that but funding for it needs to be increased. The native plants program means that we can create a healthy environment for birds and at the same time discourage Canada geese from taking over.

- Planting drought-tolerant native plants to provide habitat for insects that support the birds.
- Planning for as long a season of bloom as possible with at least three different sources of insects, seed, and berries present.
- Instead of planting one of each species scattered throughout the garden, plant at least 3 of the same species together.

Canada geese don't especially like any of these plants. They don't like grass to grow tall because they can't see predators. Shrubs obscure their view. They prefer alien Kentucky bluegrass to our native mid- and short-grass prairie grasses like buffalo grass or blue grama. They don't like too many trees.

So, we can our work together to produce a viable population of Canada Geese while, at the same time, drastically improving our environment for our native wildlife and ourselves. With native plants and alterations to the view, we can affect the "carrying capacity" of our Front Range parks, office complexes, and neighborhoods. **Carrying capacity** is the number of individuals of a species that can be supported indefinitely without degrading the local resources. We know that when one species exceeds the carrying capacity of the habitat, the habitat is degraded and other species suffer too.

To quote Tallamy again,

"...transitioning from landscapes in which wall-to-wall turfgrass is the default, to landscapes that thoughtfully use lawn as pathways through savannahs of spreading native trees, native forbs, and warm-season wild grasses is now entirely within our grasp and presents a new way to demonstrate our creative abilities."

If we really want to solve the problem of an overabundance of Canada geese, we need to help Coloradans develop a sustainable environment.

Thank you