Frequently asked question:

Cormorant Monitoring and Management Program Bonnyville, Alberta

Alberta Environment and Parks (AEP) is initiating a Double-crested Cormorant (cormorant) management and monitoring program in the Bonnyville area.

What is the purpose of this program?

Alberta Environment and Parks is taking steps to understand the impacts of cormorants on fish populations and manage cormorant numbers in the Bonnyville area. This spring, Fish and Wildlife staff will be oiling cormorant eggs on the Frog and Muriel Lake colonies. Egg oiling is an effective technique to reduce the cormorant populations over time. Staff will also be monitoring cormorant colonies, completing nest counts on Frog and Muriel Lakes and investigating other lakes in the area for additional cormorant colony locations.

Why was this program initiated?

Alberta Environment and Parks has been advised of concerns from anglers and community members in the Moose Lake area regarding cormorant negative impact on fish populations.

How long will this program run?

The program is anticipated to run for 3 to 5 years, but will be evaluated as the program develops. This multi-year program is to help evaluate and understand the relationship between cormorants and sport fish.

What will happen under this program?

The program will have two components; wildlife management and fisheries management. Wildlife management activities include:

- Determining cormorant numbers in the Bonnyville area
- Completing movement surveys to determine where cormorants are coming from and where they are feeding
- Collecting and analyzing cormorant diet samples to determine what the birds are feeding on
- Identifying co-nesting species, inventorying and implementing mitigation measures to prevent disturbance to these species.
- Cormorant management through egg oiling to reduce the population sizes in the area.

Fisheries Management activities include:

- Fish community assessments on waterbodies in the area of Moose Lake to determine number and size of fish and any trends in the populations.
- Angler effort surveys may be completed to understand angling pressure and harvest from waterbodies within the study area

How will the cormorant populations be monitored?	Staff will visit known cormorant colonies in the area to complete nest counts, and will survey the program area for additional colonies. Information will also be collected to help determine cormorant movements and feeding patterns in the Bonnyville area.
How will cormorant numbers be managed, and where?	AEP staff will oil eggs on the Muriel and Frog Lake colonies this spring. Oiling eggs prevents the embryo from developing and is less likely to cause the cormorants to abandon the nest or colony and re-nest elsewhere. Egg oiling can also be done with the least amount of disturbance to the colony and other co-nesting species. Cormorants have been observed feeding at Moose Lake, but there are no colonies living on the lake. AEP believes some birds may be coming from colonies on Muriel and Frog lakes.
Will this program have impacts on other species?	Cormorants are co-nesters, which means they nest alongside other bird species such as pelicans, great blue herons, gulls and terns. Alberta Environment and Parks has considered the potential impacts to these species, and will be mitigating impacts by minimizing time spent on or around the colonies to reduce impacts to these co-nesting species.
Will this program be expanded to other areas of the province?	The program will not be expanded beyond the study area at this time. The impacts of the program to fisheries and wildlife species will be determined before considering whether to expand the program.
Are cormorants causing reduced perch populations in Moose Lake?	This is a question the program looks to answer.
Have there been other studies in the province that included cormorant monitoring and management?	Cormorant monitoring and management occurred in the Lac La Biche area as part of the Lac La Biche Restoration program. Cormorant numbers were managed as part of this project to aid the restoration and recovery of the extirpated (locally extinct) walleye population in Lac La Biche.
What is some basic biology about the	The species of cormorant found in Alberta are double-crested cormorant (*Phalacrocorax auritus*). They are called this because during the breeding season they grow tufts of feathers, or crests, on either side of their head. During the breeding season their eyes turn a brilliant turquoise.

cormorants in the Bonnyville area?

On average, double-crested cormorants live for about six years but may live up to 20 years. They mature and are able to breed at age three. Nesting may occur on islands in trees or on the ground and usually occurs on islands alongside other migratory waterbirds.

They winter in the southern states and return in the spring to spend the breeding season in the northern hemisphere.

Are Cormorants Native to Alberta?

Yes, cormorants are native to Alberta. Their population size has varied over the years and at one point they were considered endangered. They have since recovered and are considered secure in Alberta.

What species of fish do cormorants typically consume?

Cormorants are opportunistic, generalist feeders. This means that they don't have a preferred species of fish and will eat any species that have a size that they can fit in their mouth. Their diet will typically be dominated by whatever species is easiest to catch and/or most prevalent in the lake they are feeding on. Their diet will also shift throughout the summer depending on colony location, food availability, and if they are feeding young.

How much fish does a cormorant consume? What size of fish do they normally eat?

Cormorants consume approximately 20 per cent of their body weight in fish/day. The mean weight of an adult cormorant is approximately 2 kilograms. Cormorants are gape limited, meaning they only eat what they can fit in their mouths whole. They typically target fish that are 20 centimeters or less but can consume fish up to 40 centimeters.

How far do cormorants fly from their colony to feed?

Cormorants will fly up to 30 – 60 kilometers from their nesting colony to feed.

How can Albertans be involved?

Albertan's can get involved by reporting the location and size of colonies and foraging (feeding) groups through alberta.ca/cormorant-monitoring-and-management-program-in-bonnyville.aspx. Do not approach or enter nesting colonies – all photos should be taken from a safe distance for both you and the birds. Cormorants and the species they nest with are protected under the Alberta Wildlife Act and to willfully disturb nests is a contravention of this Act. Some of the co-nesting species may also be protected under the Federal Species at Risk Act and may be protected under the Migratory Bird Convention Act.