

51-4. BLACKFOOT RESERVOIR

Boundaries and ownership:

Boundaries(Roughly): West – Government Dam Rd, North – Blackfoot North Access Road, East – ID 34, South – China Cap Rd.

Ownership: Idaho Department of Lands, Bureau of Land Management, Bureau of Indian Affairs, Private

Focal species using the site and timing of use:

Used by waterfowl and shorebirds. Common shorebirds in summer include Greater and Lesser Yellowlegs, and Long-billed Dowitcher. Sandhill Cranes are found in the surrounding uplands during fall migration.

Colonies: Eared Grebe, Western Grebe, American White Pelican, Double-crested Cormorant, Great Blue Heron, Black-crowned Night Heron, Snowy Egret, Cattle Egret, California Gull, Ring-billed Gull, Black Tern, Caspian Tern

Location of type 1 and 2 habitat within the site:

Functional Group	Type 1 Habitat	Type 2 Habitat
waterbirds	breeding colonies, open water & emergent vegetation	none
large waders	breeding colonies, emergent vegetation	rest of shoreline
secretive marshbirds	water's edge	none
waterfowl	open water, edges during breeding season	none
shorebirds	exposed mudflats during spring/fall migration (eastern side of reservoir starting in July)	rest of shoreline
gulls and terns	breeding colonies, all areas	none

Access to the type 1 and 2 habitat and visibility of the birds:

A plane would be the best way to survey waterfowl on the open water. Using a plane to take aerial photos for counting nesting gulls, pelicans, and cormorants on Gull Island may also be a good way to survey the island. Otherwise, a boat would be necessary. A boat would also be needed for surveying grebes nesting along island shorelines. There are public boat ramps at a few places around the Reservoir, although water levels are so low that many ramps are not usable. Shorebirds may have to be surveyed from the shoreline, although there are only a couple access sites on the east side of the reservoir. Visibility of nesting birds on the island is very good, and visibility of other birds is not really known at this point.

Conservation issues:

- Disturbance of nesting colonies (American White Pelicans, Double-crested cormorants, California and Ring-billed gulls) is a serious problem
- Reservoir can be drained for irrigation. This is especially a problem in drought or low-water years. This impacts the fishery and possibly reducing the birds' food base. Low water could also leave the nesting island exposed to predation and disturbance.
- Fisheries managers are concerned about pelican and cormorant impacts on stocked rainbow trout and on native Yellowstone cutthroat trout
- Sportsmen are concerned about bird impacts on recreational fishing in the reservoir

Conservation measures taken, in progress, or proposed:

- Fisheries biologists have conducted a two-year study on pelican and cormorant food habits on the reservoir. Pelicans and cormorants were found to have a significant impact on stocked fish. Biologists are implementing various stocking options to reduce bird predation on stocked fish. Biologists are also concerned about pelican impacts on Yellowstone cutthroat trout during migration up the Blackfoot River and at the spawning areas. Hazing activities have been undertaken to discourage birds from congregating in areas where fish are vulnerable to predation.

Past and current surveys:

- Colonial nesting waterbirds (American White Pelican, Double-crested Cormorant, gulls, terns, and herons) have been surveyed by Chuck Trost for multiple years, by IDFG biologists in 2002-2004, and will likely continue being conducted by IDFG personnel in the future.

Potential survey methods

Description

- Nest searches for grebes and other waterbirds nesting in the emergent vegetation in small colonies. Boat is necessary for access.
- Colony counts for pelicans, cormorants, herons, egrets, gulls, and terns by either aerial survey or boat survey.
- Census for waterfowl and other waterbirds on the open water by boat or by aerial survey.
- Area searches for migrating shorebirds from observation points near Type 1 habitat.
- Systematic sampling, probably including the use of playback calls, for secretive marshbirds.

Selection bias: Shoreline access is limited. Shorebird counts might be restricted to only a few sites unless they can be done by boat, but extensive mud flats and shallow water might also be a limiting factor.

Measurement error and bias: Water level changes from one year to the next, which could bias surveys, particularly for shorebirds. Observer bias could be an issue as well. If volunteers are used, their skills could vary widely. On the other hand, the skills of one individual conducting surveys each year would likely improve over time and therefore also present a bias.

Needed pilot studies: Design of colony counts for gulls is needed.

Contact:

NAME: Martha Wackenhut - IDFG
 ADDRESS: Idaho Department of Fish and Game
 1345 Barton Road, Pocatello, ID 83221
 PHONE: 208/ 232-4703
 FAX: 208/ 233-6430
 EMAIL: mwackenhut@idfg.state.id.us