

The Refuge administrative office is located in Brigham City. Office hours are 8:00 a.m. 4:30 p.m., Monday through Friday. Currently there is no Refuge visitor center and group presentations are limited. Please take time to review the following Refuge regulations. An understanding of these regulations will make your visit to the Refuge a more safe and enjoyable one for you and the wildlife that live here.



**FISHING** - Permitted in river channels only. Fishing in the Refuge impoundments is reserved for the birds.



**WILDLIFE VIEWING** - Viewing opportunities are restricted to the auto tour route dike. Please do not disturb the wildlife.



**AUTO TOUR ROUTE** - A 12-mile auto tour route is open daily during daylight hours mid-March through December.



**BICYCLES** - Permitted only along the auto tour route.



**PETS** - Pets must be on a leash and controlled at all times.



**CAMPING** - Not permitted. Privately operated campgrounds are available in Brigham, Willard, and Mantua.



**FIRES** - Not permitted.



**FIREARMS** - Not permitted except during approved hunting seasons.



**BOATING/CANOEING** - Not permitted except during approved hunting seasons. Bear River Channel is open to public boating upstream from the old Refuge headquarters site year-round.



**ATVs/SNOWMOBILES** - Not permitted.



# BEAR RIVER MIGRATORY BIRD REFUGE



BRIGHAM CITY, UTAH

## MULTITUDES OF WATERFOWL



urrounded by arid desertlands, it's little wonder the Bear River marshes have been an historical waterfowl oasis. Explorer John C. Fremont witnessed such a concentration of flocks that he wrote in 1843 "the waterfowl made a noise like thunder...as the whole scene was animated with waterfowl".



As settlers moved into the area, ambitious projects were undertaken to divert great quantities of river water for use by upstream settlements and farms. The marshes began to dry. By 1920, only two or three thousand acres of the original forty-five thousand acres of marshland were left. The loss of the marshlands through drying was a serious problem affecting the survival of migrating birds. But the drying occurred slowly, and attracted little attention or concern.

Avian botulism, on the other hand, created gruesome scenes of hundreds of thousands dead and dying waterfowl and shorebirds. Records show that in addition to the two million birds that died in a 1910 outbreak, another die-off in 1920 claimed one and a half million birds. It was the public's reaction to these deadly epidemics that brought about action. In response to urging from many individuals and organizations, Congress in 1928, passed a special act to make the delta a National Wildlife Refuge.

## THE FLOOD



n 1983, the rising waters of the Great Salt Lake topped Refuge dikes, contaminating wildlife habitats with salt water and destroying marsh vegetation. Dikes and water control structures were heavily damaged and all buildings were demolished. In short, the Refuge was rendered inoperable.

By 1989, the lake receded enough that Refuge dikes could again be seen. Refuge employees, aided by scores of volunteers, began working to put Bear River Migratory Bird Refuge back together. A plan of action to restore and improve the Refuge was put in place. It includes:

- ❖ Restoring habitat to attract migratory birds, including waterfowl, shorebirds, other water birds, raptors, and passerines by:
  - cleaning up debris (cleaning)
  - repairing 43 miles of dikes and water control structures (repairing).
- ❖ Enhancing attractiveness to migratory birds by:
  - upgrading water control facilities allowing for optimum wetland and upland management for wildlife food and cover
  - improving waterfowl habitats through a combination of fee and easement purchases that would enlarge the Refuge.
- ❖ Reducing botulism losses by:
  - providing optimum water flows and depths within the impoundments,



- creating smaller units within the existing large impoundments, so there are draw-down capabilities of marsh units that become disease "hot spots" during botulism outbreaks.
- ❖ Providing recreational and educational opportunities
  - building a new visitor center near I-15,
  - developing displays, tour routes, innovative wildlife viewing stations, and other public use facilities.

## THE REFUGE TODAY



o date, close to 1 million cubic yards of earth has been moved to restore and enhance the Refuge. Forty-seven primary water control structures have been restored along with over forty-seven miles of dikes. Through volunteer efforts, debris has been removed from the old headquarters site and a new pavilion, restroom, demonstration pond, and kiosk have been built on the site. The 12-mile auto tour route has been reopened to the public.

Bear River Refuge today consists of 74,000 acres. Approximately 9,000 acres were added to the Refuge through land acquisition during 1993-94. Much of this new property consists of uplands, wetlands, and mudflats. The historic 65,000 acres of Refuge consist of marsh, open water, and mudflats. Salts deposited by the flood have been flushed out enough to allow re-establishment of marsh plants, such as alkali bulrush and sago pondweed. Now, birds are returning in ever increasing numbers to the Refuge and its marshes.

## WHEN TO SEE THE BIRDS



pring is a particularly enjoyable time to visit Bear River Refuge. There is a continuous flow of different species in and out of the Refuge. Each day offers something new. Birds are in their bright and colorful breeding plumages, and the observant visitor can witness eons-old courtship rituals.

Baby birds may be seen as early as May when the Canada goose goslings make their debut. Later, in June and July,

visitors can view ducklings and young shorebirds such as American avocets and black-necked stilts. In June and July the sight of young western grebes riding atop their parents' backs is especially exciting.



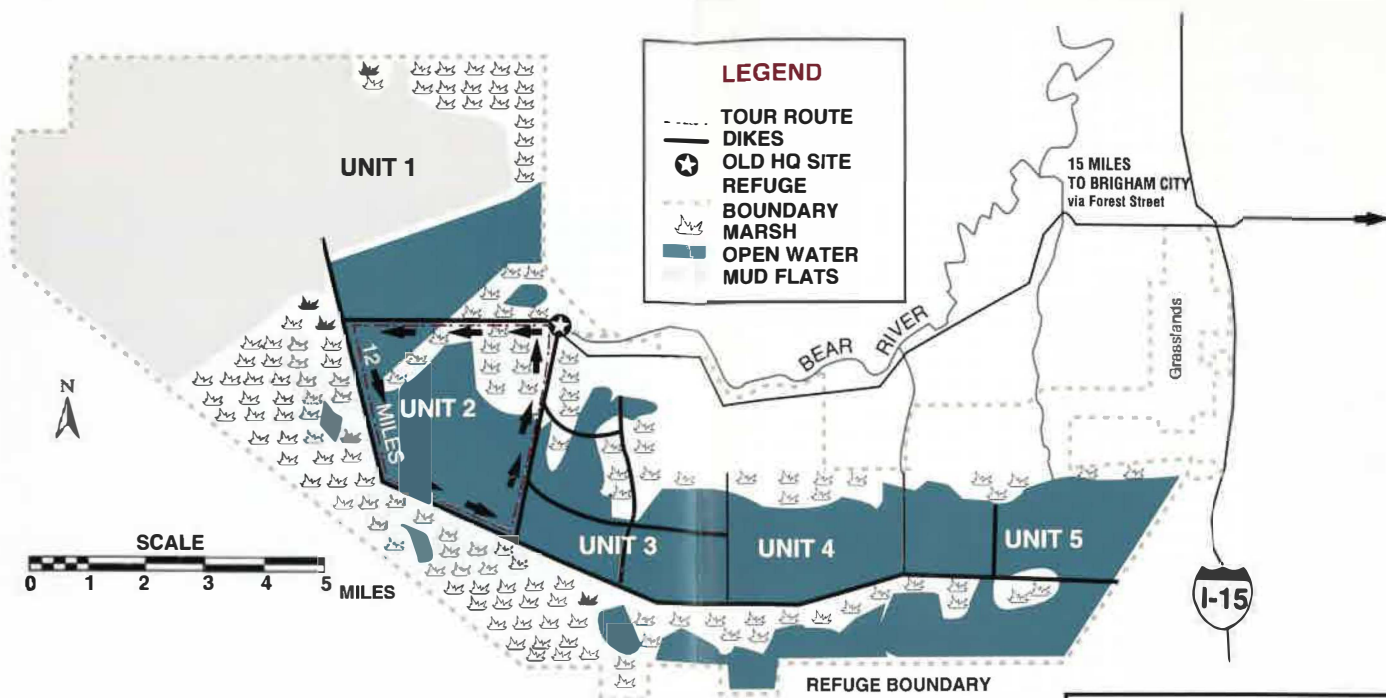
White pelicans are common at Bear River Refuge much of the year. Parent birds make frequent flights between the Refuge and a nesting island in the Great Salt Lake. Small fish in the Refuge pools provide an excellent source of food for the adults and their waiting young. After the chicks are fledged, they join flocks of adult birds in executing aerial maneuvers high over the Refuge.

Up to half a million ducks and geese concentrate on the Refuge water impoundments in the fall. Tundra swans begin to arrive in mid-October, and in November, the flock increases to over 15,000 birds.

Most birds leave the Refuge when the impoundments freeze over, usually by late November. Only a few species, such as Common ravens and Red-winged blackbirds are year-round residents.

From December through March, Northern harriers, Rough-legged hawks, Prairie falcons and Bald eagles frequent the marsh, searching the frozen land for prey.

The millions of feathered visitors that congregate here during migration will ultimately spread out widely over the hemisphere. Recoveries of birds banded at Bear River Refuge have shown that while many remain in the United States, principally west of the Mississippi River, some, may fly as far as Russia, Central America, or the islands in the Pacific.



## VISITOR INFORMATION



The Refuge can be reached from I-15 by taking the Forest Street exit at Brigham City and driving west approximately 15 miles. Visitor activities include birdwatching, photography, fishing, and hunting waterfowl and pheasant in season. Located at the old headquarter site is a fishing pier, pavilion, and restroom which are fully accessible to persons of all abilities.

Visitors may drive or bicycle on a 12-mile auto tour route which starts and ends at the old headquarters site. Activities are confined to the auto tour route dike. All other areas on the Refuge are closed to public use except during approved hunting seasons.

The Refuge auto tour route is open every day from sunrise to sunset except January through mid-March. All visitors must be off the Refuge before dark.



The U.S. Fish and Wildlife Service seeks to afford persons with disabilities full accessibility or reasonable accommodation. Contact Refuge Headquarters for more information or to address accessibility problems. For the hearing impaired, use your State Relay System for the Deaf.



## FOR MORE INFORMATION CONTACT:

The Refuge Manager  
 Bear River Migratory Bird Refuge  
 Brigham City, UT 84302  
 (801) 723-5887



Department of Interior  
 U.S. Fish and Wildlife



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