

Building Merritt Dam



Excavation of the core trench on the west side of Merritt Dam during May 1963. Note the series of wells and waterlines to dewater the work.

A dragline is setting the form in place for the morning glory section of the spillway inlet structure during June 1963.



A Jersey spreader lays down soil cement facing on Merritt Dam in November 1963.

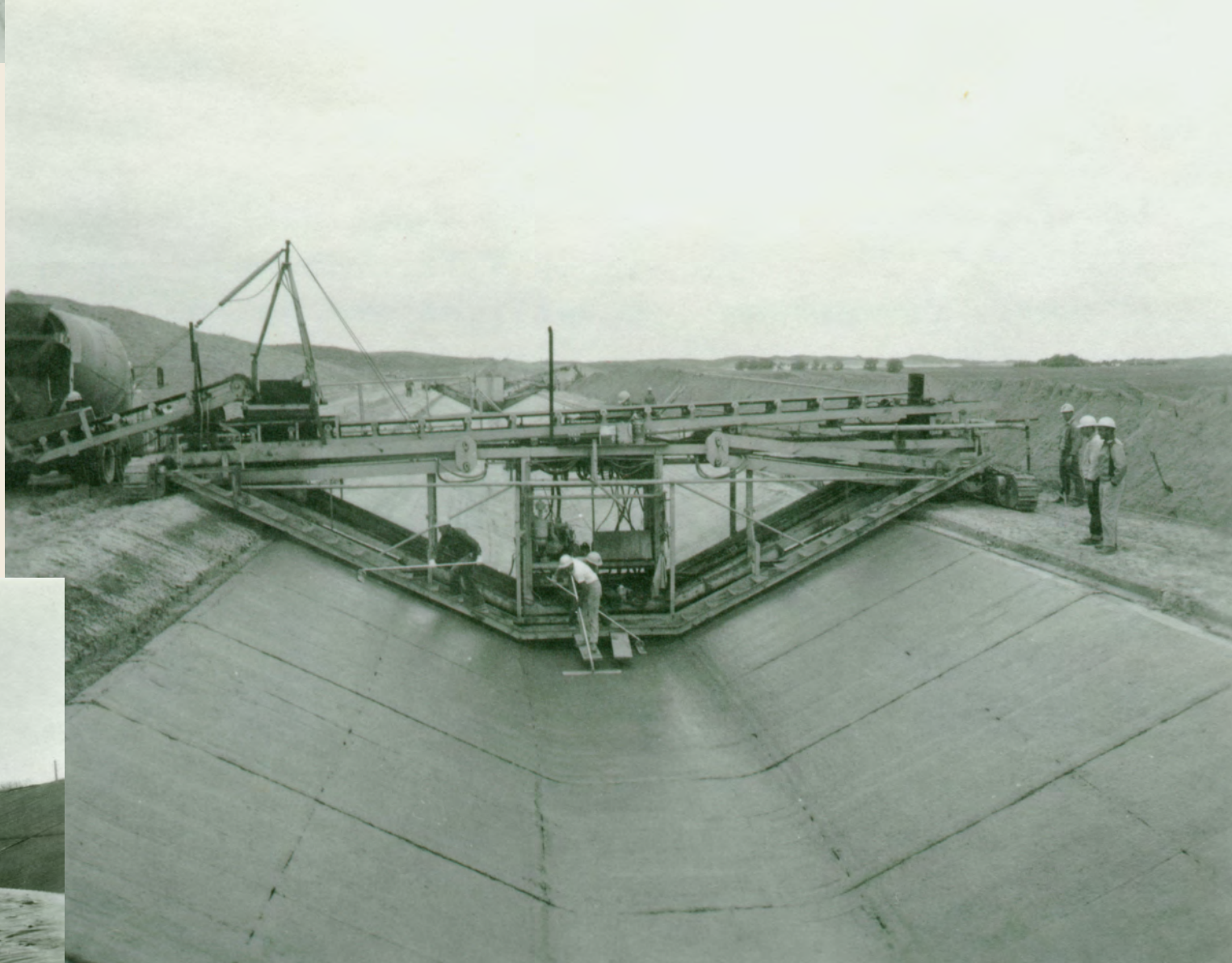
An aerial image of the dam and reservoir taken September 24, 1964.



The 78 inch steel outlet works pipe had been partially buried but was washed out by heavy rain on June 30, 1962.

Lining of Ainsworth Canal in 1962.

The image below shows sand blown into the prism in January 1964 before the berm was mulched.



The American Burying Beetle

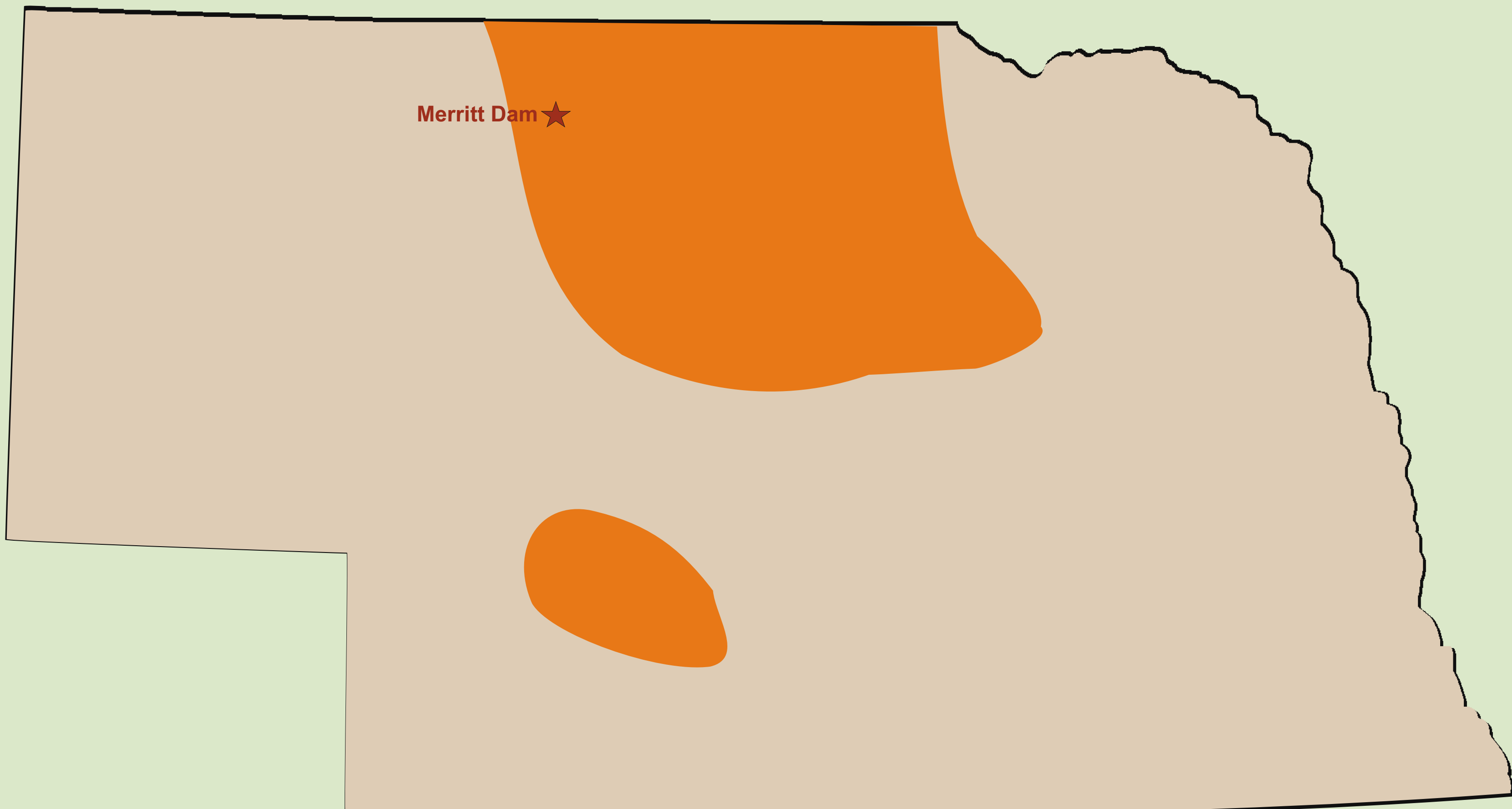


This creature has an amazing ability to keep our landscape clean. Although they are only 1½ to 2 inches long, these beetles work hard to find and bury dead and decaying animals (carriion). To the beetles, carriion is food and necessary for their complex reproductive process. To humans, their activities benefit the entire ecosystem by recycling nutrients. They are so efficient that they often complete their task before flies can use the carcass for their own breeding, which helps keep pest fly populations in check. Researchers are also investigating antimicrobial properties of their secretions for pharmaceutical use.

Nebraska provides one of the last strongholds for this species declared endangered in 1983. The sandhills area provides one of the largest intact areas of habitat for the beetle in North America. Merritt Reservoir is on the western edge of the beetle's range and has relatively high densities of beetles. To protect the habitat at Merritt, lights that minimize light pollution have been installed. You can help conserve the American burying beetle during your stay by keeping fish stations clean and avoid using bug zappers.

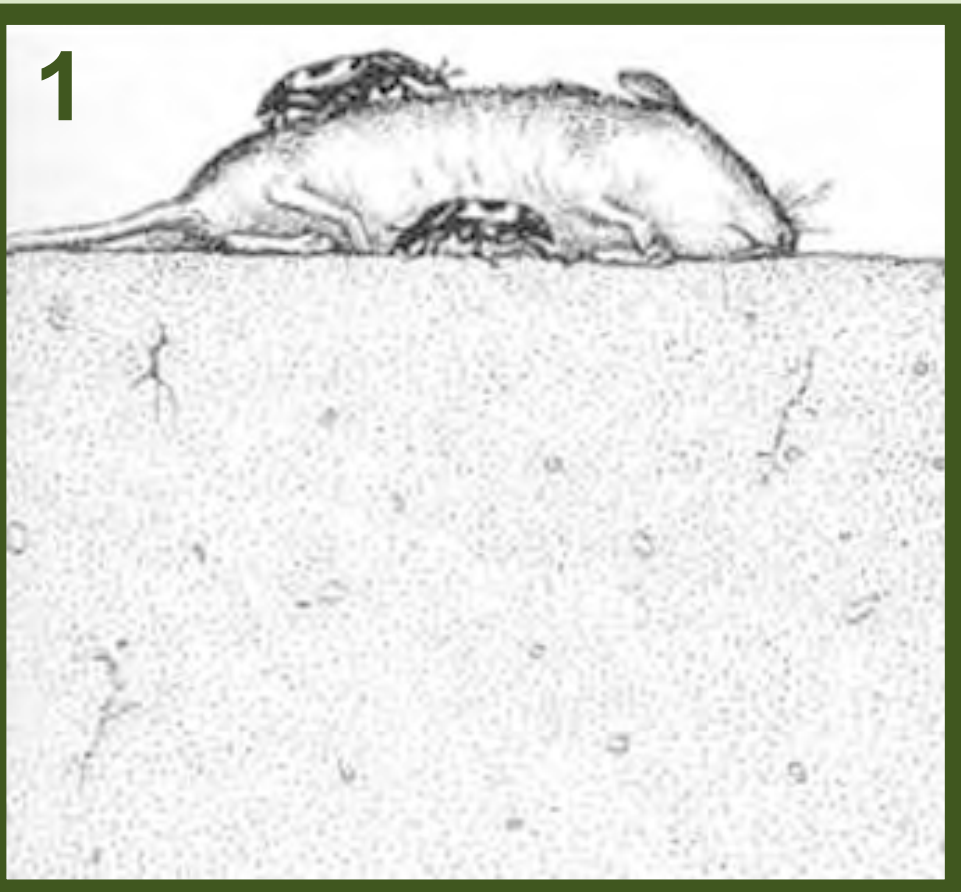
The American burying beetle is the largest carrion-feeding insect in North America. It belongs to the family Silphidae. It is shiny and black with two bright orange bands on each wing cover. You can identify an American burying beetle from other burying beetle species because the pronotum (shield-like area just behind the head) is orange. In other, more common species, the pronotum is black. The American burying beetle is active from early June through September, with their breeding period being from early July through mid-August.

American Burying Beetle Nebraska Distribution

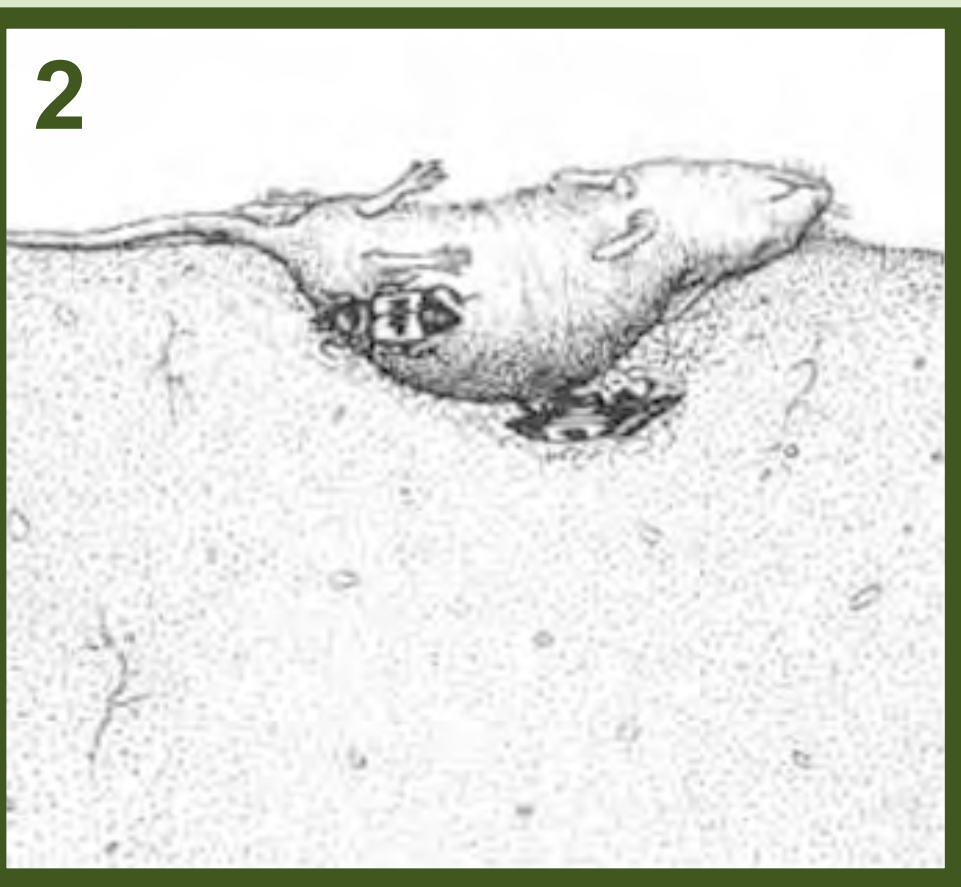


Map data and American Burying Beetle information courtesy of Nebraska Game and Parks Commission.

What the Beetle Does



1) Using their antennae, they have an amazing ability to detect a carcass, such as a ground squirrel, up to two miles away. Even if it died only a few hours before. These carcasses are scarce and the perfect place to find a mate.



2) If the carcass is the right size, the pair will move it up to a few feet to a spot where the ground is soft enough for burial.



3) Using bulldozer like movements, they plow through the ground, moving it upward around the carcass.



4) As soon as the carcass is completely buried, the pair strip away fur or feathers and work the mass into a compact ball in which they lay their eggs. The mass is preserved by the beetles with antibacterial secretions.



5) The parents stay and process food for the larvae, tend the carcass with more secretions and if needed, defend their carcass from attack. When the larvae become an inactive pupa, the adults leave.



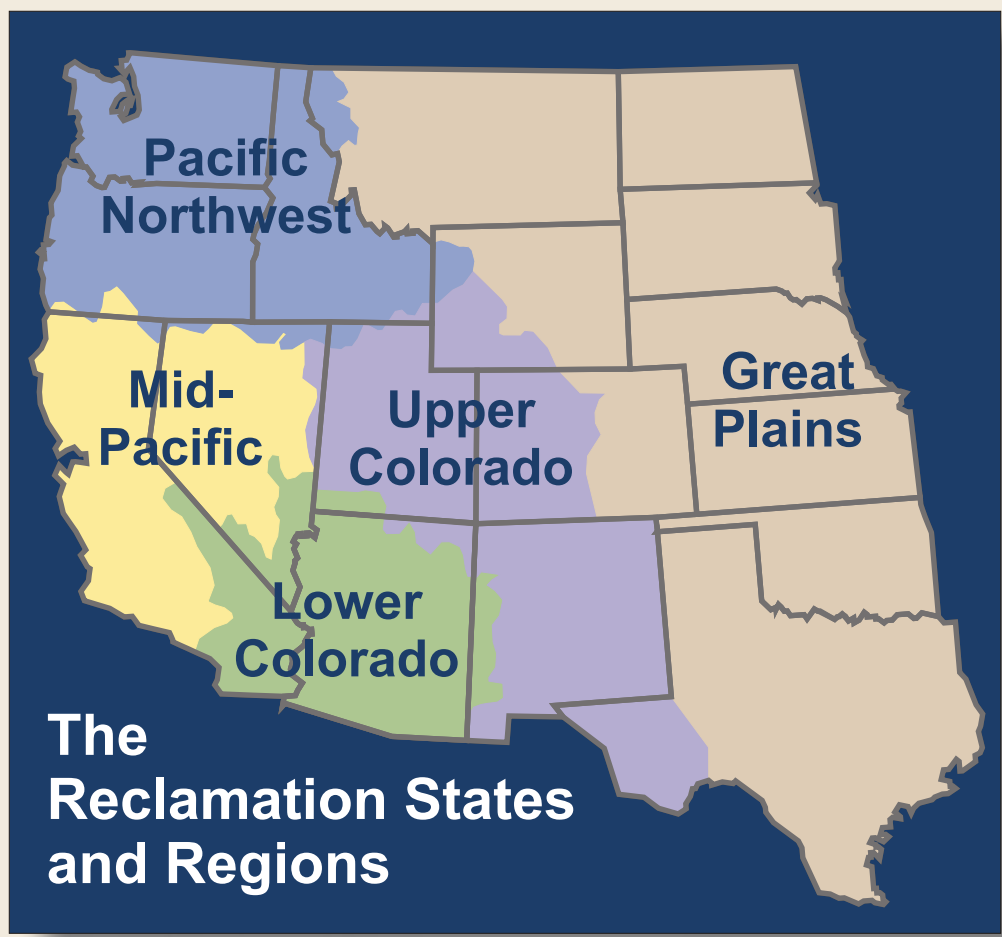
6) When the young are about one month old, they emerge as adults.

About Reclamation

The Bureau of Reclamation was created in 1902 to provide water projects for the development of the American West. Heavy snowmelt and spring rains often resulted in early flooding followed by hot, dry summers with too little moisture for successful farming or even domestic needs. There was a need to store the surplus moisture to prevent flooding and to provide water for use during the dry months.



In 1902, President Teddy Roosevelt signed legislation creating the Reclamation Service (later renamed the Bureau of Reclamation).



Reclamation manages 348 reservoirs in the 17 western states with a total storage capacity of 245 million acre-feet (an acre-foot, 325,851 gallons of water, supplies enough water for a family of four for one year).

Today Reclamation manages, develops, and protects water and related resources in an environmentally and economically sound manner in the interest of the American public and:

- serves as the fifth largest electric utility in the 17 Western States and the nation's largest wholesale water supplier,
- provides 1 out of 5 Western farmers (140,000) with irrigation water for 10 million farmland acres that produce 60 percent of the nation's vegetables and 25 percent of its fruit and nuts,
- operates 58 hydroelectric powerplants averaging 42 billion kilowatt-hours annually,
- delivers 10 trillion gallons of water to more than 31 million people each year,
- manages in partnership 308 recreation sites visited by 90 million people a year.

Partnerships at Merritt

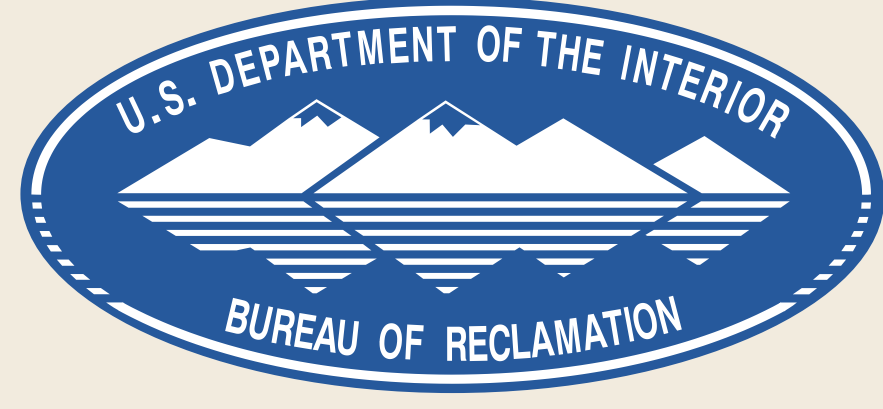
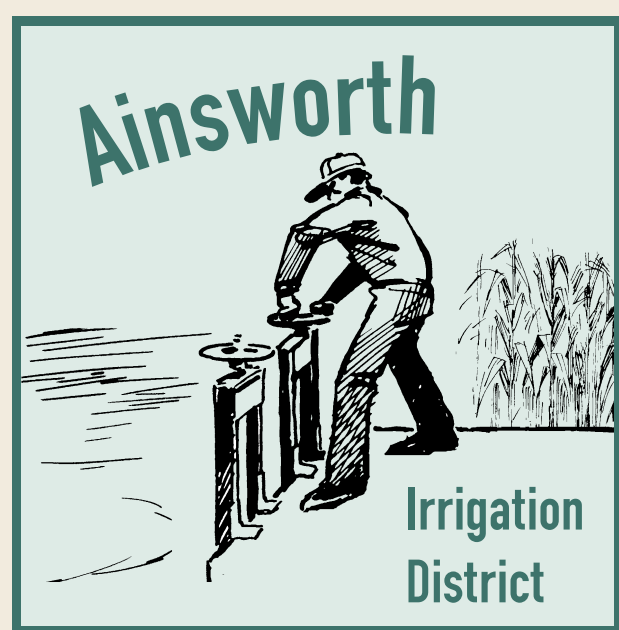
Reclamation's Nebraska-Kansas Area Office manages Merritt Dam and Reservoir which was constructed by the agency.

Reclamation partners with Nebraska Game and Parks Commission to provide recreational, fish and wildlife opportunities at the reservoir and to manage lands around the reservoir.

The Ainsworth Irrigation District maintains and operates the dam and irrigation water delivery facilities that serve about 35,000 acres of crop land.



NEBRASKA GAME AND PARKS COMMISSION



Great Plains Region
Nebraska-Kansas Area Office

Merritt Dam and Reservoir

This reservoir was created as a part of the basin-wide comprehensive development plan known as the Pick-Sloan Missouri Basin Program. Merritt's benefits to the American public include irrigation and recreation. The reservoir has 44 miles of tree-lined shoreline and provides visitors with swimming, camping, water skiing, picnicking, fishing, hunting, and

The sport fishery at Merritt Reservoir is considered to be some of the best Nebraska has to offer. It is a deep lake with excellent inflow from the Snake River and Boardman Creek. Walleye, muskie, crappie, bluegill, perch, and white bass have long been the favorite choices of angler, though lunker-size channel catfish have recently been "discovered" in the Snake River arm of the reservoir. Several state records and master angler awards have been recorded at Merritt Reservoir.



Merritt Dam and the headworks of the Ainsworth Canal.

Access to the lake is available at public boat ramps in the Powder Horn, Main, Beed's Landing and Snake River areas. Fishermen particularly enjoy the modern fish cleaning stations at Beed's Landing and Main areas.

Modern recreation facilities are available at the Main Lake, Cedar Bay, Beed's Landing, Boardman, and Snake River campgrounds. The facilities include electrical hook-ups, handicapped accessible showers, restrooms, drinking water, and picnic areas. Primitive overnight facilities are also available at all the areas. Merritt Dam and Trading Post, the area concession, is located at the east end of the dam.

Ainsworth canal delivers water to the irrigation distribution system in Brown and Rock counties. Irrigation helps support the agricultural economy of northcentral Nebraska.

What's In a Name?

Ever wondered how Merritt got its name? Merritt Dam is named for J.M. Merritt, who had a long career with the Nebraska Game, Forestation, and Parks Commission. Merritt was the Superintendent of the Valentine Fish Hatchery for three years and was a resident of the Valentine area between 1923 and 1933.

The Snake River



The Snake River below Merritt Reservoir provides excellent fishing for brown and rainbow trout. From late fall through early spring, releases to the river are similar to inflows into the reservoir.

During the summer irrigation season, flows are diverted to the canal, and river flows are reduced. Storm runoff is captured in the reservoir to reduce flooding and provide additional water for later use.

In the fall, river flows are stored in the reservoir to refill it for the following year. Some water may be released to the river during the summer months to maintain trout habitat. Water temperature, river elevation and reservoir condition are carefully considered in determining the optimum releases to the river.



Rainbow Trout (above) and brown trout (left).
Photo and fish illustrations courtesy of NEBRASKA Game and Parks Commission.

