

Warm Springs Wildlife Management Area: A Study in Managing for Multiple Values

Jerry Gallagher and Michael R Frisina

The Montana Fish Wildlife & Parks, Ducks Unlimited, and a local rancher pooled their resources and found they could accomplish more by working together than separately. It happened in southwest Montana near the town of Warm Springs. The project includes the state owned Warm Springs Wildlife Management Area and neighboring Ueland Cattle Ranch. The Warm Springs Wildlife Management Area is maintained to produce waterfowl and provide public recreation. It is an important area for the production of ducks, geese, and shorebirds.

Warm Springs Wildlife Management Area:

The Warm Springs Wildlife Management Area consists of about 1,000 acres of land leased by the Montana Fish Wildlife & Parks from Montana State Hospital. Prior to 1970, when the Wildlife Management Area was formed, these lands were used by the State Hospital for agricultural



The Warm Springs project provides important habitat for large numbers of waterfowl.

operations. The landscape consists mostly of grass pasture land, ponds, willows, and a few cottonwoods along Warm Springs Creek. Grain is grown on a portion of the area to provide food for waterfowl. In 1989 Ducks Unlimited con-

structed seven ponds which provide 120 surface acres of water. The ponds are shallow and vary in size from 5.4 acres to 33.9 acres.

These ponds are used by both puddle and diving ducks. The Warm Springs Wildlife Management Area is an important waterfowl nesting and rearing area for all types of water birds. Each year approximately 2,000 ducks, 200 geese, 240 sand hill cranes, and 50 swans utilize habitats created by the Warm Springs project. Whitetail deer utilize woody cover along Warm Springs Creek and riparian areas support populations of beaver and muskrats.

Ueland Ranches Inc.

The Uelands have incorporated a 700 acre portion of their ranch into this project. The lands consist of two distinct vegetation types. The southeast half is a grass covered dry bench. The northwest half is a grass and carex meadow complex with willow cover along several small creeks. During January and February 1990, Ducks Unlimited constructed 18 small ponds on the Ueland Ranch. These ponds are each one acre or less in size. Whitetail deer inhabit the ranch year round. Sand hill cranes also nest and feed here.

Grazing System:

A grazing system was initiated in 1990 and consists of four pastures with two on the Warm Springs Wildlife Management Area and two on the privately owned Ueland Ranch. These pastures vary from 350 to 410 acres in size.



Cattle grazing on the Ueland Ranch.

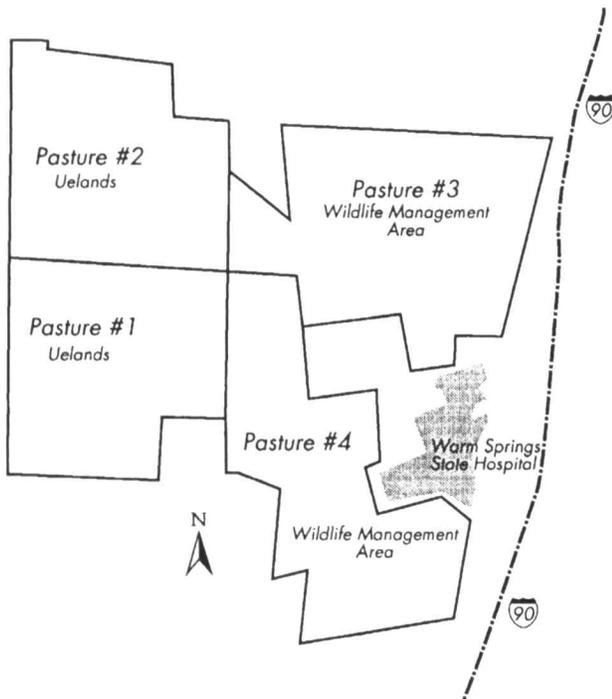


Fig. 1. Schematic illustrating the layout of pastures within the Warm Springs grazing system.

The system allows for 200 AUM's of livestock grazing annually. Each year two pastures are grazed by cattle and two rested from livestock use. The cattle grazing season begins about August 15th, after the duck nesting season is completed and near the end of the plant growing season. The late starting date in combination with growing season rest and total rest the previous season maintains the residual cover required by ducks as nesting habitat. Every year ducks and other ground nesting birds have two pastures to nest in which have residual vegetation as a result of the previous years rest treatment plus the current years plant



Ducks require adequate residual vegetation for successful nesting. (Photo by Dave Books)

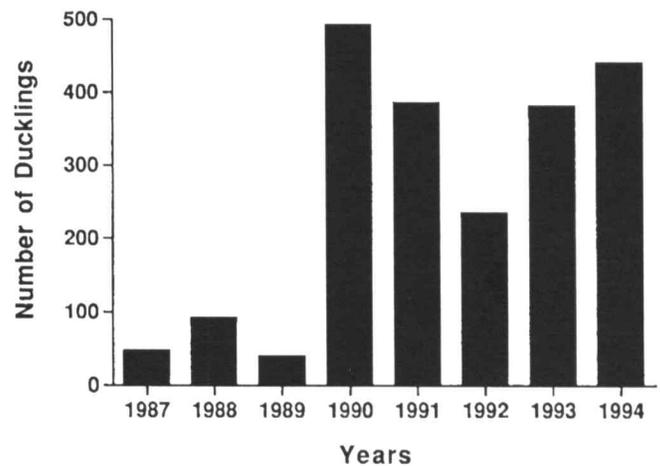


Fig. 2. Graph displaying the trend in numbers of ducklings produced on State Hospital leased lands within the grazing system.

growth. The pastures grazed the previous year have the current years growth plus residual stubble left after the previous years grazing was completed. Without adequate vegetation to serve as cover, duck eggs are very susceptible to predation. This approach provides for a livestock operation yet gives ducks what they need to produce successful hatches of ducklings. The long growing season rest periods also allow the vegetation opportunity to recover from the short term effect of cattle defoliating the plants through grazing. The Uelands benefit by utilizing vegetation produced on the Wildlife Management Area as forage for their livestock. The benefit Montana Fish Wildlife & Parks receives for this grazing is rested pastures on the Ueland Ranch. The result is an expanded influence of the Wildlife Management Area. Cattle do well under this system because they begin the grazing season in a pasture with a full years vegetative growth. Cattle graze in the system until November when they are moved to the winter feed grounds. Compared to an earlier approach of continuous grazing, this approach increases rangeland productivity and thus carrying capacity for cattle.

Discussion

Meeting the needs of wildlife populations and maintenance of economically viable livestock operations are major issues on rangelands throughout the American west. As demonstrated by the Warm Springs project these goals do not have to be contradictory.

This partnership serves as an example of effective land management. It is a practical solution, managing for multiple uses while protecting the basic resources of plants, soil, and water, from which all users are dependent. During the planning process, all parties had to give up something to gain consensus, but in the end by pooling resources all interests have gained more than by working alone.