City of Fort Collins Natural Areas Department

Resource Management 2014

Poudre River Restoration Continues

Resource Management field crews spent many days nurturing the thousands of native plants associated with the river restoration projects at McMurry and North Shields Ponds natural areas. While the project used plants native to our area, they will still need supplemental water to establish a robust root system. Temporary irrigation systems installed allow for ample water to move throughout the site, while providing the flexibility and durability for future use.

Restoration of Grasslands

In an effort to increase the overall number of acres with predominantly native vegetation, native grass, shrubs, and wildflowers were planted at several local grassland natural areas. Native seeding projects get started years earlier by reducing weeds and non-native grasses on the site. Once weeds are controlled (not often a quick or easy task) and the soil is cultivated to expose fresh soil, seed is then carefully sown. Seeding is quickly followed by another round of weed control and monitoring to ensure progress toward the goal of a 75% composition of native vegetation. In 2014, 172 acres were planted into native seed bringing the area of actively managed restoration to 1,539 acres. An inventory revealed that 78% of these acres are currently dominated by native plants or are progressing in that direction.

Total Acres Under Active Restoration:
1,539 acres!

Current Condition of Restoration	# of Acres	% of Total Acreage
> 75% native plants	616 acres	40%
25%-75% native plants	585 acres	38%
> 25% native, weedy plants dominant	323 acres	21%
Bare ground, restoration in progress or Cover crop	15 acres	1%

Less Time Spent on Weed Control = More Time for Restoration!

Historically, there was a strong focus by the Natural Areas Department on controlling noxious weeds. Well, that effort is paying off! Staff is now able to dedicate more resources to restoring land with poor habitat value rather than playing a defensive strategy of simply treating noxious weeds. Previously, staff has spent thousands of hours annually controlling noxious weeds. In 2014, the amount of time spent controlling weeds was reduced by 71% over previous years.

Resource Management gets a New Tractor and Mower

The Natural Areas Department's Resource Management Team replaced its original Massey Ferguson tractor in 2014. Additionally, a new style of mower, a "flail" mower, creates a finer mulch, allowing faster decomposition. This is an important new tool to help recycle nutrients in ways that attempt to mimic the evolutionary presence of grazing animals on the shortgrass prairie.

Volunteers Help Steward!

In 2014, volunteers and staff surveyed for Colorado butterfly plant on Soapstone Prairie Natural Area and Meadow Springs Ranch. Under the guidance of Crystal Strouse, Natural Areas Botanist, volunteers contributed 116 hours to the survey!

Volunteers also donated 161 hours to assist with collecting over 50 different species of native plants. These species will be used to facilitate various restorations at Coyote Ridge, Arapaho Bend, Springer and Soapstone Prairie natural areas.

Black-footed Ferret Management

In 2014, the Natural Areas Department reintroduced the black-footed ferret to Northern Colorado. The Resource Management Crew played a major, multi-year supportive role in that effort. In 2014, the RM crew applied plague preventing insecticide to hundreds of acres. Though this is not ultimately a preferred management technique, at this point it is the only feasible method to significantly reduce the likelihood that prairie dogs (the prey base of the ferret) do not succumb to a decimating plague event.

Poudre River Breeding Bird Survey

The third year of breeding bird surveys on the Poudre river properties was completed. This survey provides a picture of avian species richness, habitat condition and usage. Survey results show that species with a preference for tree canopy habitat appear to be doing well and are relatively abundant. Conversely, species that prefer to use mid-story habitat (shrub thickets) and forage on or near the ground are not abundant. Competition from non-native vegetation and the absence of disturbance have contributed to the lack of mid-story habitat that these species prefer. The data will be used to support restoration of the disturbance events (high flows) that shape riparian habitat structure.

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