

The Natomas Basin Conservancy Habitat Preserves

Goals

Under the current NBHCP, which has a 50-year lifespan, 17,500 acres will be urbanized and 8,750 acres of habitat preserve land will be established. Approximately half of the preserve land is designated for habitat-friendly rice farming, with the rest divided between managed marsh and upland preserves.

Typical preserve

Acquisition and Site Analysis

As funds become available from mitigation fees, the Conservancy buys land for each new habitat preserve. The land is surveyed for conditions that affect restoration plans, such as past wetland occurrences, position in landscape, water supply, soil types, and the presence of existing wetlands or special-status species. A habitat plan is designed for the site, making the best use of its natural attributes while aiming for the total acreage goals described above. Some sites will be kept almost entirely in rice production, while others will include some creation and restoration of managed marsh and upland habitats.

Acreage Breakdown

The Natomas Basin = 53,341

Acreage covered by the current NBHCP:

Planned development = 17,500

Habitat preserves = 8,750

Allocation of habitat preserve land:

Managed marsh = at least 25%

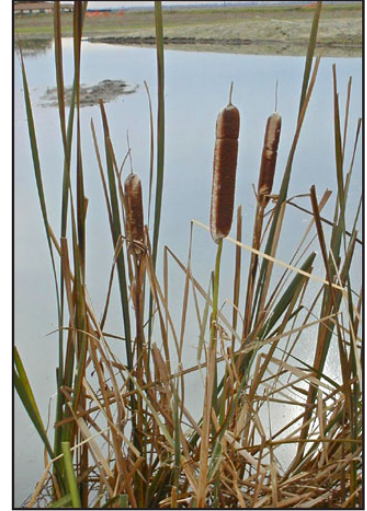
Upland habitats = up to 25%

Rice farming = approx. 50%



Habitat Restoration and Preserve Stewardship

Managed Marsh: Managed marsh complexes are created by recontouring the land into winding channels and back-water sloughs, planting native vegetation, and providing perennial water. To a giant garter snake, the newly created channels offer an abundance of fish and frogs for prey, and the grassy berms provide basking, resting and escape cover. The Conservancy provides stewardship of the marshes that includes water management in order to promote perennial and seasonal marsh vegetation that will provide habitat structure for marsh-dwelling species.



Upland Habitats: The Swainson's hawk needs upland and riparian areas for foraging and nesting habitat. Restoring fields to native grassland creates excellent habitat for voles and other prey the hawk consumes. Pastures and fallow crop lands are also managed to support a good prey base. One such technique is to periodically mow or graze the vegetation to keep it short enough for the hawk to find its prey.

The hawk also needs nesting habitat, which requires riparian woodlands and isolated tall trees. Several Conservancy habitat preserves include existing wooded corridors, as well as new plantings of oaks, cottonwoods, sycamores, and other native trees and shrubs that contribute to a healthy ecosystem.

Rice Farming: Maintaining 50 percent of the Conservancy habitat preserve lands in rice production serves cultural, ecological, and economic purposes.

The qualities that originally made the Basin a productive and complex natural ecosystem also made it fertile for farming. Soils that formed in ancient basins and marshes presented a challenge to early farmers trying to grow familiar crops such as wheat, but proved to be well-suited for growing rice. Today the Sacramento Valley is known for the highest rice yields in the world. Dedicating some of the Conservancy lands to rice fields helps sustain the agricultural tradition of the Basin.

Conservancy tenant-farmers follow management practices that provide good quality habitat for the giant garter snake and minimizes the potential for harming the snakes.

Finally, the Conservancy's rice lands also provide income to help finance long-term stewardship of the habitat preserves.

Q: How much rice is left in the fields after harvest, and what is it good for?

A: Between 150 and 350 pounds of rice per acre is left over in the fields, lost to the harvester. This becomes an important source of food for meadow mice (microtus), the primary prey species for Swainson's hawk and many other birds.



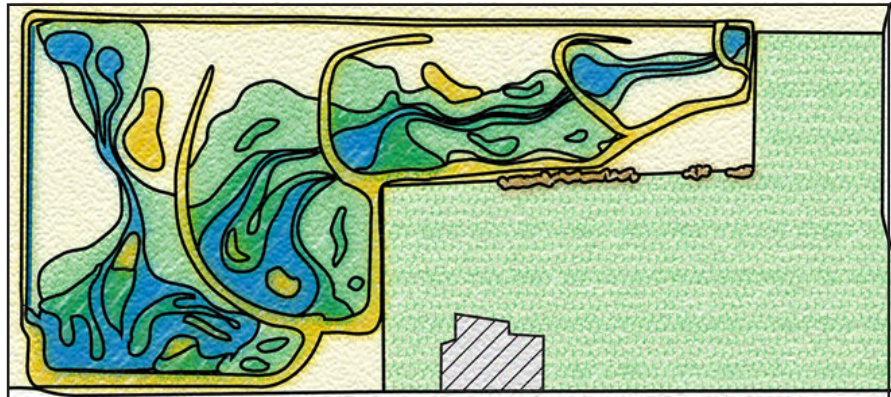
Wildlife biologists have documented the occurrence of giant garter snakes in this ditch bordering a Conservancy rice field.

Sequence in Creating Habitat

Before habitat creation
(aerial photograph):
grazed and fallowed
agricultural land



Design stage:
Concept for
creating mosaic of
habitat uses



After habitat construction,
but before significant
vegetation development
(aerial photograph):
Constructed habitat
includes ponds,
sloughs, marshes,
upland basking mounds,
and grassland areas.



Looking Ahead

In a growing urban environment, natural lands that remain are cherished. The intrinsic value of nature and wildlife are further enhanced by the realization that open spaces have practical benefits, such as helping to ameliorate pollution and moderating climate effects. Most of all, natural landscapes, systems, and wildlife are protected for future generations.

The Natomas Basin Conservancy's habitat preserves form a part of that heritage. Creating preserves according to a regional plan prevents the habitat fragmentation that would occur with haphazard mitigation. The planned approach also provides for habitat creation and management that is cost-effective.

There are economic benefits as well. The plan allows for permitted, managed development to occur, and assures an agricultural presence in the Basin.

By implementing the Natomas Basin Habitat Conservation Plan, the Natomas Basin Conservancy will make certain that the Basin will continue to harbor its rich variety of plants and animals - especially giant garter snakes and Swainson's hawks.

Can you see the future? An artist's rendering depicts the marsh habitat that the Conservancy is creating from this field

