

# HARDING PARK GOLF COURSE INTEGRATED PEST MANAGEMENT PLAN

*SUGGESTED REVISIONS*

## **WILDLIFE MANAGEMENT**

Submitted by

**SAN FRANCISCO QUAIL RECOVERY TASK FORCE**

20 September 2003 Final Draft

### **6.9 WILDLIFE MANAGEMENT**

#### **6.9.1 BACKGROUND**

The Harding Park Golf Course renovation and planned participation in the P.G.A. Tour Championship allows the City of San Francisco to create a model for the nation for developing the wildlife potential of urban golf courses. It also provides an opportunity to create a template for wildlife management within San Francisco's four other city-owned golf courses.

As part of 650 acres of city-owned open space at Lake Merced, Harding Park is situated in an area of high wildlife value that includes 250 acres of open water. As many as 50 bird species breed at Lake Merced, which provides critical habitat for thousands of migrating birds along the Pacific flyway.

Harding Park is also situated amidst more than 1,500 acres of City, National, and State Park lands and private golf courses, providing one of San Francisco's most extensive open space, recreation, and wildlife opportunities.

The San Francisco Department of the Environment, Recreation and Park Department staff, and a balanced panel of interested citizens have conferred to develop this Wildlife Management addendum to the Harding Park Golf Course Integrated Pest Management Plan.

#### **6.9.2 PURPOSE**

The purpose of managing urban golf courses for wildlife is to make the best use of limited public lands to provide healthy habitat for wildlife in the midst of densely populated areas.

#### **6.9.3 SCOPE**

Managing Harding Park Golf Course for wildlife offers golfers, golf course staff, and interested citizens the opportunity to address a broad range of environmental concerns related to the impacts of vegetation management, water consumption, and chemical use on local water sources, wildlife species, and habitats.

#### **6.9.3 GOALS**

The overall goal is to balance recreational use with wildlife enhancement, creating a partnership with mutual benefits between sport and nature. And, by engaging a broad base of volunteers, wildlife stewardship activities also make golf courses multi-purpose recreational facilities serving a greater number of residents.

#### **6.9.4 WATER ISSUES**

Lake Merced, an important stopover for migratory waterfowl on the Pacific flyway, borders two sides of Harding Park Golf Course and comes into play on the 18<sup>th</sup> hole. The golf course's impact on water quality and water levels at Lake Merced will be an important aspect of wildlife management of the golf course.

#### **6.9.5 QUAIL RECOVERY**

In July 2000, the San Francisco Board of Supervisors approved a Resolution naming the California quail (*Callipepla californica*) the official City bird and calling for the Audubon Society, SPCA, and other interested groups to create a plan for quail recovery in San Francisco that can be implemented “without killing other animals.”

The Quail Recovery Task Force convened in December, 2002, with support from the San Francisco Department of the Environment and Community Boards Dispute Resolution Services. The Golden Gate Audubon Society, San Francisco SPCA, and San Francisco Parks Coalition held discussions and visited potential quail recovery sites with assistance from the Recreation and Park Department.

The resulting Quail Recovery Plan identified Harding Park Golf Course as one of four agreed upon sites to begin quail recovery efforts. Harding Park was selected because of its advantageous size and location; the potential to provide adequate forage, water, and cover for quail; the relative lack of conflicting activities; and, a recent history of supporting quail populations.

#### **6.9.51 QUAIL RECOVERY PLAN (QRP)**

Harding Park quail recovery will be carried out in accordance with the Quail Recovery Plan for San Francisco (QRP).

The QRP is a consensus plan intended to provide a guide for managing, protecting, and augmenting California quail populations in San Francisco in a way that creates the least conflict and promotes the most cooperation with other park uses.

The QRP focuses on habitat enhancement rather than predator control or restrictions on recreation; recognizes that the basic habitat requirements of quail enable them to live in properly managed park situations including golf courses; and recognizes that quail recovery is compatible with continued multipurpose use of city parklands.

#### **6.9.52 PREDATOR CONTROL**

Quail recovery shall be implemented without killing other animals. Removal or relocation of predators may result in death and other unintended negative consequences. Therefore, any proposed removal or relocation of predators of any kind must be submitted in writing to the San Francisco Recreation and Park Department for review and recommendation. In each proposed case, the Department will consult with San Francisco SPCA to determine whether the relocation or removal is feasible and, if so, how best it can be done. If the relocation or removal is approved by SFRPD, the Department will utilize the pro bono services of SF/SPCA to accomplish the task unless SF/SPCA declines to participate.

#### **6.9.53 QUAIL HABITAT AREAS**

The Recreation and Park Department has agreed to develop areas of appropriate habitat to facilitate quail recovery within the golf course interior to connect with other areas of habitat in the surrounding area (See map).

#### **6.9.54 QUAIL HABITAT IMPROVEMENT**

Habitat improvement is the cornerstone of any wildlife recovery program. To increase the extent of and improve the quality of quail habitat, the following actions are recommended:

- ***Outreach to and organize a broad base of stakeholders***
- ***Familiarize volunteers with the Quail Recovery Plan and Harding Park IPM Wildlife Management Plan***
- ***Outline a plan of action for the site to be improved***
- ***Set specific goals and objectives***
- ***Survey, map, and monitor the recovery site***

#### **6.9.55 VEGETATION LIST AND PLANTING TIMETABLE**

The Department and the Quail Recovery Task Force have developed a vegetation list along with a design of plantings that will promote quail recovery on the golf course. (See Vegetation List and Planting Design).

- SFRPD staff and volunteers will begin planting the Quail Habitat Areas in the Winter of 2003-2004 with a goal of at least 200 plants by December 31, 2003.
- A minimum of 200 plants will be installed by December 31<sup>st</sup> in each of the following three years toward a goal of reintroducing the first quail populations after four years of habitat enhancement.

#### **6.9.56 QUAIL REINTRODUCTION**

The goal will be to reintroduce the first quail populations as soon as adequate habitat is available. This decision will be made in consultation with the Golden Gate Audubon Society and in accordance with the Quail Recovery Plan. A sustainable winter population of 50 quail is the goal for Harding Park Golf Course.

#### **6.9.57 MAINTENANCE**

SFRPD staff will include maintenance of quail habitat as an integral part of their golf course maintenance schedule. However, maintenance efforts will rely substantially upon volunteers as described in Section 6.10.3.

Golf course employees are encouraged to employ Best Practices management techniques and to develop public outreach strategies to educate golf course users and others on how they can support wildlife.

#### **6.10.3 RESOURCES**

The SFRPD Volunteer Coordinator will work with Harding Park management and staff, golfers, the Golden Gate Audubon Society, SF/SPCA, parks groups, and other interested citizens to achieve wildlife goals in partnership with recreation.

Partnerships and volunteer recruiting efforts will be aimed at all segments of the community, with a particular focus on golfers, SFRPD golf course maintenance staff, and the golf course management staff. Through wildlife management, golfers can actively participate in hands-on stewardship of the land while pursuing their sport. It is expected that this stakeholder involvement approach will develop the greatest vested interest and ongoing effort to sustain wildlife habitat.

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#### **LIST OF ATTACHMENTS:**

1. Map of Harding Park Golf Course Habitat Areas
2. Plant List

## Plant List

Although this plant list consists primarily of plants indigenous to San Francisco, plantings are not limited to indigenous species. California quail are able to utilize many nonnative plants. However, suitable quail habitat plantings, whether native or nonnative, must conform to the essential elements of valley quail as described by Emlen and Glading in “Increasing Valley Quail in California.”

The only plants that are definitely excluded are those listed as invasive by the California Exotic Pest Plant Council ([http://groups.ucanr.org/ceppc/Pest\\_Plant\\_List/](http://groups.ucanr.org/ceppc/Pest_Plant_List/)) or species that would pose maintenance problems for the Recreation and Park Department. However, some plant species create impenetrable ground covers that provide no habitat value and should be avoided.

### **Sun Tolerant**

#### Trees and shrubs for Roosting

1. California Wax Myrtle
2. Coast Live Oak
3. Monterey Cypress
4. Monterey Pine
5. Toyon
6. Hawthorn (*Crataegus* sp.)
7. Holly (*Ilex* sp.)
8. Juniper sp.
9. Prunus sp.

#### Shrubs for cover and food

1. Artemisia sp. (California Sagebrush)
2. *Atriplex lentiformis* (Quail bush)
3. *Baccharis pilularis* (Coyote bush)
4. *Ceanothus* sp. (California Lilac)
5. *Ericameria ericoides* (Mock Heather)
6. *Eriophyllum staechadifolium* (Lizard Tail)
7. *Lupinus arborescens* (Yellow Bush Lupine)
8. *Lupinus chamissonis* (Silver Dune Lupine)
9. *Rubus ursinus* (California Blackberry)
10. *Sambucus racemosa* (Elderberry)
11. Lotus
12. *Ribes sanguineum* (Flowering currant)
13. *Rhamnus californica* (California Coffeeberry)
14. *Eriogonum latifolium* (Coast Buckwheat)

15. Aloe Vera
16. Artemisia absinthium
17. Berberis wilsoniae (Wilson's Berberis)
18. Bidens sp
19. Cistus sp. (Rockrose)
20. Cotoneaster horizontalis (Rock Cotoneaster)
21. Hypericum inodorum (St. Johnswart)
22. Juniper sp.
23. Rosmarinus officinalis (Rosemary)
24. Salvia clevelandii (Sage)
25. Yucca gloriosa (Spanish Dagger)

### **Shade Tolerant**

#### Trees for Roosting

1. Willow
2. Dogwood (*Cornus sericea ssp. sericea*)

#### Shrubs and forbs for cover and food

1. Monkey Flower (*Mimulus sp.*)
2. Miner's lettuce (*Claytonia perfoliata*)
3. Chickweed
4. Fiddleneck (*Amsinckia sp.*)
5. Clovers (*Trifolium sp.*)
6. Gooseberry (*Ribes ovalifolium*)
7. Thimbleberry (*Rubus parviflorus*)
8. Twinberry (*Lonicera sp.*)
9. Western Bracken Fern (*Pteridium aquilium*)