2007 ANNUAL REPORT OF MAINTENANCE AND CONDITIONS OF DEL MONTE FOREST OPEN SPACE PROPERTIES

The Del Monte Forest Foundation (DMFF) administers ongoing maintenance operations in order to comply with the Maintenance Standards for each of its open space properties held in fee or by easement. Annual reporting was begun in 2001 by Mary Howden, Chairman of OSAC at that time, and her initial report provided a succinct discussion of the historical background of OSAC's development of Maintenance Standards for each individual open space property contained in the Local Coastal Program Land Use Plan and subsequent adoption of a maintenance standard for the Huckleberry Hill Natural Habitat Area, the nearly 373 acres of open space dedicated in conformance with the LUP.

This annual report of maintenance and conditions for Del Monte Forest Open Space Properties summarizes significant maintenance activities during 2007 and offers observations, comments and recommendations after discussion and review by the Open Space Advisory Committee (OSAC).

SFB MORSE BOTANIC RESERVE

The site remains in compliance with its maintenance standards and has had a relatively uneventful year compared to 2006. Trail conditions have been maintained and drainage structures remain in place on Fire Roads 1 and 2 and on both the Crawford (Purple) Trail and the northerly Morse Reserve (Green, Red, Yellow, Brown & Blue) Trail. As before, use of these creekside trails is made primarily by pedestrians but with some mountain bikers and equestrians as well. However, no significant adverse impacts were noted from current, relatively modest levels of use. Flows were light enough this winter that the watercourse channel crossing of the flat on the Crawford Trail did not shift significantly. Customary temporary trail closures again occurred due to fallen dead and live trees, in this case in three different locations. The area on the Crawford Trail burnt by the two small, adjacent fires that occurred in late July and early August of 2006 has begun to recover, although several oaks and at least one large pine appear to have been killed by the fire. In spite of the obvious dead oak limbs, the area is dramatically more open than the immediately surrounding areas, giving an indication of how things might look like if periodic ground fires occurred. Naturally established pine regeneration noted in last year's report has grown and is more visually apparent in some of the more open parts of the Reserve where light is more available due to pine mortality in recent years. Planting of pines does not appear to be necessary except perhaps in a few areas.

Control of non-native invasive plants such as acacias, pampas grass, genista and gorse was again done at known infestation sites and supplemented by periodic hand weeding during seasonal inspections. In cooperation with Pebble Beach Company, Gabilan Camp crews maintained fire roads and breaks in the Reserve in accordance with Fire Defense Plan standards that also conserve sensitive plant habitats. Dr. Jyotsna Sharma, a University of Florida orchid specialist, again visited for her ongoing research on *Piperia yadoni* on the Reserve and other properties with the cooperation Del Monte Forest Foundation and Pebble Beach Company.

Recommendations

Continue annual maintenance program of timely exotic plant control and trail work. Continue to monitor natural regeneration of Monterey pines in areas of recent pine mortality to see that long-term replacement is occurring at adequate levels. Planting of limited numbers of pines is recommended in the understocked area just above Congress Road and north of the Crawford trail. Establish photo monitoring points for the less than ½ acre area burnt on the Crawford trail to document response to fire. Continue to maintain and enhance drainage on the FDP fire roads.

CROCKER CYPRESS GROVE

The site is in basic compliance with the standards in the Management Plan. Learning from past experience, consistent, timely control of invasive exotic plants during dry growing days following periods of rain proved to be very effective during 2007. Effective control of veldt grass was the product of 12 separate treatments from January through the beginning of May. Additional work was done in June and August. Four photo points with 4 views per point were established in order to provide a visual monitoring record of stand and understory conditions over time. To restore the native understory where invasive plants have been controlled, seed was collected from a variety of native species and was sown and grown for outplanting in 2008.

Mortality of mature pine trees continues to occur in the Grove due to either mechanical failures during storms or the combined effects of bare beetles and pitch canker. In general, storm related failures occur when strong winds cause trees either to uproot or break in the lower trunk where there is internal defect. Trees that fail for either reason frequently damage or kill other trees as they fall by uprooting or breaking nearby standing trees. Even during the relatively mild winter of 2007, two more trees died adjacent to the group of trees that failed during an apparently intense squall in 2006, probably due to having both their crowns and roots more exposed from the loss of their neighboring trees. The two interior areas where groups of trees have blown down in recent years are being monitored for decomposition of fallen material and natural establishment of replacement tree seedlings.

PG&E cut 1 additional dead pine in the Grove this year that threatened power lines along 17 Mile Drive. Six small seedling cypress trees near it were successfully protected thanks to extensive consultation with the hazard tree removal team. Perimeter fuel loads were maintained at low levels. Pine regeneration is sporadic but abundant to excessive in some areas and needs to be thinned in order to maintain cypress stocking at appropriate levels over time. Some natural regeneration of native cypress seedlings was noted during monitoring visits and may need to be supplemented by planting over time. Growth of young trees established in the area of high tree mortality near Portola and Porque is both visible and robust as a mix of Monterey pines and cypresses. A portion of the flat along Portola a bit west of Porque still requires establishment and shade from more cypress trees before control of invasive plants and reestablishment of natives is likely to be effective there.

Recommendations

Continue aggressive early growing season treatments to control invasive, non-native grasses in the primary infestation area in the northwest portion of the Grove while monitoring and treating the rest of the Grove as necessary. Continue photo plot monitoring to maintain a long term visual record. Continue to assess response of native plants to non-native control measures. In one or two selected areas where veldt grass and other invasives have been controlled, replant with the native understory plants collected and grown last year and collect and grow a roughly equal number for the coming season. Monitor effectiveness of these planting efforts as well as the methods and costs of continuing to control invasives in areas where the native understory plants become reestablished by planting. Continue to monitor cypress regeneration and establishment and plant native seed stock or transplant volunteer seedlings growing in unfavorable locations to the small, understocked areas identified above. Initiate control of overly dense pine restocking to control fire hazard and to favor cypress growth.

PESCADERO CANYON AND CARMEL WAY

The site is in basic compliance with its OSAC maintenance standards. The relatively mild winter storm seasons of 2007 gave a respite from the tree issues of hazard, storm failures and mortality that were experienced in 2006. Several more inspections in response to calls from neighbors about tree conditions in parts of the Canyon but the trees in question were located on adjoining residential parcels. Final data collection from the UC Davis research plot for the Monterey pine common garden genetics study was completed and trees from non-local areas were identified so that they can be removed prior to the next pollination season when beetles are least active. Significant road improvements and native tree planting were done by pebble Beach Company in lower canyon areas damaged during 2006 storms.

With fewer hazard issues to deal with, active management consisted primarily of ongoing periodic control treatments for genista, cape ivy, vinca, thistle and acacia in various parts of the canyon and moderate control has been achieved in these regularly treated areas. However, veldt grass understory dominance continues in many parts of the canyon and continuing to spread incrementally. As noted before, conditions on this property are such that real control of veldt grass and other non-native grasses is considered impractical by consulting botanists at this point.

Fuel structure and loading were evaluated in perimeter areas adjoining Carmel Woods to determine where and what kinds of treatments might be appropriate for both maintaining native plants and decreasing fire hazard. Mechanical treatments using chainsaws and string or blade trimmers ton control non-native flashy fuels or fuel ladders appear to be the only feasible control measures at this point in time. Initial planning was done with PBCSD's fire control staff late in 2007 for initial treatments in selected areas in 2008.

As noted in previous reports, dumping of landscape waste and tree debris continues to occur from upslope residential properties into the open space and is adversely affecting understory plants and creating fuels problems in some locations. Also previously noted, channel entrenchment, downcutting and associated bank instability continue to occur due to accelerated

runoff from upslope development, though impacts were relatively minor due to the below average rainfall received this year.

Recommendations

Work with PBCSD and upslope neighbors to establish a coordinated vegetation management and fuels treatment program that improves fire safety while maintaining native plants and processes as much as possible. Continue non-native plant control treatments in selected areas. Continue supplemental planting of with local native pines in understocked areas, particularly the area above Ford meadow that has been hard hit by storms and hazard removals during several previous seasons. Contact upslope neighbors to discourage landscape dumping and encourage cooperative efforts in fuels reduction and invasive plant control.

COASTAL STRIP – DEDICATED SECTIONS FROM SPANISH BAY TO PESCADERO POINT

The Pebble Beach Company maintained the required public access facilities of the Coastal Strip from Spanish Bay to Cypress Point in basic compliance with the standards set forth in the OSAC Management Plan. The bench, parking and picnic facilities at the numerous turnouts and the restroom facilities at the Bird Rock parking area appeared to be well maintained although no detailed reviews of this proposed easement area were made. Pebble Beach Company made treatments to control non-native plants within the strip, supplementing the native plant restoration area on Monterey Peninsula County Club across 17 Mile Drive between Point Joe and Bird Rock that has almost entirely eliminated a major infestation of iceplant.

Recommendations

Continue current practices of maintaining visitor serving facilities and regular cooperative control of exotic species by Pebble Beach Company and MPCC.

INDIAN VILLAGE

Indian Village remains in compliance with its maintenance standards and basic patterns of maintenance are becoming fairly routine. Approximately 10 pines felled by winter storms directly affected roads and trails at Indian Village this year. Three good sized Monterey pines fell just outside the inner gate, taking out the powerlines during one 2007 storm. Extensive cleanup of fallen material was done both there, along portions of the entry road that leads to the picnic shelter and eventually Stevenson Drive, as well as the trail west of the shelter and the area east of the potentilla exclosure. PG&E also topped or fell 4 dead trees and pruned a number of live trees for clearance from the powerlines. Broken branches hanging near the picnic area were removed for safety.

Pines in the high mortality area west of the shelter that have died due to pitch canker and bark beetles over the last five to ten years continue to decompose piece by piece. The variety of sizes and shapes of these snags (dead trees contrast sharply with increasingly numerous and healthy young pines noted in last year's report that are growing in the area now. These young trees are

volunteers from native seed mixed with planted pines grown from on-site seed that demonstrated resistance to pitch canker in inoculation tests that began more than five years ago. We expanded our testing program in 2007 to confirm pitch canker resistance in both previously planted trees and in naturally established saplings. We also took cuttings from a number of the confirmed resistant trees and began rooting them both to propagate for outplanting next winter and to establish a diverse, known base of resistant parent trees. Abundant growth of native vines and coffeeberry bushes and loss of seed source where many pines have died on the flat north of the picnic shelter leading to Seal Rock Creek appear to be restricting natural regenerationn of pines. This area should be monitored for pine regeneration and supplemented with site preparation and planting work if volunteer seedlings become established soon.

The newly rerouted trail segment that avoids the regularly flooded and saturated flat just east of the Gingerbread House was widened and fitted with trail posts this year as part of Trail Days work done in coordination with Margaret Leighton of Pebble Beach Riding and Trails Association and the invaluable skills of a crew from Pebble Beach Company's Forestry and Ecology department. The abandoned trail segment quickly became overgrown and hopefully will be little but a memory within another year or two. The new trail segment runs north and west from just inside the inner gate until it rejoins the old trail at its junction with the Nature Trail that runs west into the dunes and 17 Mile Drive. The main trail continues north and east to the picnic shelter. Trail clearance has to be maintained by removal and/or cutting of grasses, vines and encroaching limbs twice or more per growing season.

Significant fire clearance protection work was done by Pebble Beach Company behind homes along the north boundary of the Indian Village Annex parcels along Seal Rock Creek on which DMFF holds a scenic easement. Invasive kikuyu grass was noted in portions of the creek bottom during monitoring visits and additional tree mortality and loss were noted with the Seal Rock Creek corridor, especially its western portion. Although a few younger pines are becoming established, this area may also ultimately need supplemental regeneration work.

The Indian Village population of Hickman's potentilla (*Potentilla hickmanii*) fared relatively well in 2007 after the apparent depradations of gophers or other rodents noted in last year's report. Monitoring suggests that several long established plants were entirely lost to that small mammal damage.

DMFF met with US Fish and Wildlife staff preparing the Recovery Plan for the listed dune habitat plants, several of which are known to occur in the dunes portion of the Indian Village Annex easement west of the Gingerbread House. As discussed at the meeting, this dune habitat area is likely to be listed in the Recovery Plan as reserved habitat and increase opportunities for habitat restoration projects.

Control measures for non-native plants, principally invasive thistles, velvet grass, kikuyu grass, and *Festuca arundinacea* were implemented periodically over the course of the growing season. Invasives were also treated along the wet area behind the shelter and southeast of the potentilla exclosure.

Recommendations

Continue monitoring tree mortality and natural regeneration patterns to determine if supplemental pine regeneration work is need in the areas noted. Design and install trial fuels treatment/pine regeneration plots in different understory types in the central west portion of the parcel to test different fuel reduction/regeneration strategies. Investigate pile burning as a fuel reduction option. Continue resistant pine propagation program for outplanting during the winter of 2008-09. Continue regular and consistent non-native plant control program in all affected areas. Continue to monitor growth of potentilla plants and potential to augment in light of recent losses.

NAVAJO PARCELS

These two parcels adjoin the Lynn "Rip" Van Winkle Park of Pacific Grove, creating combined open space of more than 45 acres. Both DMFF parcels are in basic compliance with their OSAC maintenance standards. More extensive clearance work was done on fire roads 10, 12 and 13 this year to remove fallen trees and debris blocking the roads, creating hazardous fuel jackpots, and harming healing and growth of living trees. Ongoing invasives control work was done with primary treatment done in April of principal areas of recurring genista infestation with persistent seedbanks and on holly, which appears to become established annually at low levels due to seed dispersal by birds. Spot weeding of invasives occurred later in the year in the course of periodic site reviews.

The overstory of dominant and co-dominant pines continues to age. The forest appears more open as the older cohort of trees incrementally decreases in density due to normal mortality and as the live crowns of the pines becoming increasingly restricted to only the upper parts of the tree. Oaks appear to be growing well generally, perhaps in part due to increased available light under the less dense pine foliage. Natural pine regeneration is occurring at highly variable rates in the forest here. Densest regeneration appears to be occurring in areas which have more available light and understory cover dominated by native forest grasses. No symptoms of sudden oak death were observed in this forest, which has a higher proportion of oaks, including larger oaks, than most other areas in the Del Monte Forest. As noted in prior reports, dead trees not immediately adjacent to fire roads occur and are retained for habitat complexity. This area continues to receive extensive recreational use, often on unauthorized trails.

Recommendations

Monitor and mitigate naturally occurring tree hazards consistent with conservation and maintenance of a natural area. Continue to monitor the area and identify specific locations where restoration measures may be needed to correct trampling and erosion. Control genista, larger holly, and other invasive infestations on an ongoing basis. Monitor bank stability and downcutting in the northern watercourse that receives drainage from the school and Congress Avenue. Monitor naturally occurring young pines for density and health to evaluate whether rates of establishment are sufficient to maintain an adequate pine overstory over time.

PESCADERO POINT

Pescadero Point is in basic compliance with its OSAC maintenance standards. Parking, drainage, and native plant restoration projects continue to function well considering the level of visitor use the site receives. As recommended in last year's report, cypress seedlings grown from native forest seeds were planted in selected locations the western half of the site where rocks or dead trees provide some protection from prevailing winds and surf spray. All seedlings survived through the end of the year and will be monitored over the normal establishment period of several years. Existing native cypresses on the site continue to appear to well established and in good health. Cable fencing has decreased trampling and erosion of portions of the site, which receives a tremendous amount of visitor use. Toward the end of the year, DMFF was cooperating with PISCO (Partenership for Interdisciplinary Studies of Coastal Oceans) to establish a new marine monitoring site in the intertidal zone that should become operational in 2008.

Recommendations

Continue regular monitoring of the site for public safety and natural resource protection, including maintenance of signage discouraging trespass into natural areas on both this and the adjoining Hill Preserve parcel. Control iceplant regrowth.

SFB MORSE MEMORIAL LOT

The parcel of native cypress habitat is compliance with the general standards set forth in the OSAC management plan. Invasive plants, principally grasses such as kikuyu and veldt grass continue to dominate significant portions of the understory of this low lying parcel that adjoins Cypress Point Club, Crocker Grove and residential development. Routine perimeter maintenance issues were addressed.

Recommendations

Continue regular annual maintenance operations.

HERMANN PROPERTY

The parcel is compliance with the general standards set forth in the OSAC management plan. Annual maintenance operations occurred to reduce perimeter fire hazard by mowing cured grasses along the west and northern boundaries and controlling invasive plants, principally genista and a little acacia, vinca, and pampas grass. These invasives have effectively been controlled but persist at very low levels and require annual treatment. Planted and volunteer native pines have become established on parts of the parcel, growing through the predominantly grassy understory.

In arranging for routine maintenance, four pines that had had their tops severely cut out in the latter part of June were discovered. DMFF removed the cut material and debris and treated the

surrounding trees to try and control bark beetle activity that such tree vandalism encourages, particularly when done here at the height of the growing season. DMFF publicized the problem and provided educational materials in a community publication on the harmful effects of tree topping. Unfortunately, one of the four trees had died by the end of the year and bark beetle activity noted on three other adjoining trees. The four pines were topped immediately adjacent to a long term pine forest monitoring plot, potentially affecting health and longevity trends at that study location.

Recommendations

Treat in early spring and later summer the pines adjacent to the 4 topped trees to control bark beetle infestation. Monitor natural regeneration at the topped tree site and elsewhere and provide extra care to encourage successful establishment. Collect on-site cones to propagate seedlings for replanting next winter to assure full tree replacement to full stocking levels. Continue routine annual maintenance operations as outlined above. Cooperate with neighbor to control invasive acacias and eucalyptus. Monitor new plantings and natural regeneration of oaks and pines in the western portion of the parcel.

HUCKLEBERRY HILL NATURAL HABITAT AREA

The Huckleberry Hill parcel is in basic compliance with its OSAC maintenance standards. Routine monitoring and follow-up clearing kept fire roads and trails open over the course of the year after occasional closure by fallen pine trees. Photo point monitoring was initiated to document recovery of vegetation within the two areas affected by spot arson fires set in the summer of 2006 along the Crawford Trail. Appropriate drainage and erosion control were also maintained on the trails during the rainy season. Gabilan Camp crews worked at length to maintain fire roads and fire breaks in accordance with Fire Defense Plan standards as confirmed by inspection of the Fire Marshall.

Dead Gowen cypress trees previously planted to replace non-native Monterey cypress trees growing next to the native stands of Gowen cypress in the Upper Pit were replanted to maintain on-site replacement ratios with native stock. This phased work is being done to prevent any potential for unnatural cross-pollination between the two species. Final replacement of non-native Monterey cypresses in the Upper Pit area with native Gowen cypresses and Bishop and Monterey pines is expected to be completed within the next one to two years.

Treatments controlling non-native plants occurred periodically over the year, maintaining reduced infestation levels of genista and acacia within the revegetation areas of the former quarries as well as other sites within the dedicated open space of Huckleberry Hill. While pampas grass has been largely controlled and genista levels significantly reduced, spot occurrences of gorse and blackwood acacia were noted and treated and will require periodic attention in the future.

Perhaps the most major occurrence within Huckleberry Hill during 2007 was the closure of the rock quarry after its many years of operation. Pebble Beach Company regraded and seeded the recent quarry area and revegetated Haul Road with native plants as required by the County and

the Coastal Commission. A small area remains dedicated to Pebble Beach Company's maintenance operations including wood storage and a highly effective greenwaste composting facility.

CDF supervised crews extended the shaded fuel break at the top of Huckleberry Hill an extra 100 feet into the doghair dense stands of regenerated pine below Los Altos and Costanilla, completing the 250' deep fuel break over all but about 100' of its nearly quarter mile length. Understory vegetation in the newly thinned areas is expected to follow the same pattern of healthy recovery that is apparent in most of the older sections of the fuel break. Annual treatments of invasives within the fuel break were made and are necessary both there and throughout the open space of Huckleberry Hill.

Recommendations

Continue phased removal of Monterey cypress and replanting in the quarry revegetation areas as planned. Complete the last small extension to full 250'width for the shaded fuel break along the top of Huckleberry Hill. Continue annual operations to thin trees and treat understory plants within the fuel break to meet standards. Continue to control non-native plants at appropriate times and locations over the year to prevent spread and increase occupancy by existing natives. Increase invasives control in areas along the Highway 68 not associated with fire roads or trails.

CORTLANDT HILL PRESERVE

The parcel is in basic compliance with the natural open space management standards. Routine perimeter fire clearance was done and included some weeding of invasive plants including poison hemlock. Several small cypress seedlings were noted on monitoring visits but continue to be rare. Minor trampling of vegetation occurred on one day in December as a result of surfing spectators.

Recommendations

Continue monitoring of the parcel and limit access to resource study and maintenance activities only. Evaluate desirability of clearing or pile burning of some dead and broken material to enhance cypress regeneration and establishment of native understory vegetation. Continue to control iceplant infestation to maintain habitat conditions suitable for native plants while avoiding exposure and erosion from immediate bluff areas.

SCENIC EASEMENTS

Easement monitoring is ongoing as are contacts with individual easement holders. In most cases, some control measures for non-native plants have been recommended. Residential construction commenced in the new easement in native cypress habitat along 17 Mile Drive near the Midway Point and several site visits and contacts with County staff were made to monitor progress and impacts and to recommend protective measures. DMFF reviewed and approved landscape restoration plans within a residential property easement for native plant habitat that had been degraded. Implementation is expected during 2008. DMFF provided review, comment and

recommendations to protect native habitat adjacent to a proposed project on another residential easement. Information on appropriate maintenance activities within easement areas and sources of native plants were provided to several landowners with easements. DMFF provided complete information on its properties and easements to Monterey County planning staff in a cooperative effort to assure that DMFF received timely notice of any permitted activities that might affect DMFF open space.

Recommendations

Continue periodic inspections of existing scenic easements by the Forest Manager. Maintain coordination with the Pebble Beach Company's ARB and/or the County of Monterey informing DMFF of any pending construction on property that has, or should have, a scenic easement according to the terms of the LUP.

This Annual Report of the Maintenance and Conditions of Del Monte Forest Open Space Properties is hereby respectfully submitted.

Jerry Verhasselt, OSAC Chairman
Del Monte Forest Property Owners

Stephen Staub, Forest Manager
Del Monte Forest Foundation
OSAC Vice Chairman

DATE: 3/28/08