

FOCUS ON RARITIES: Plants of Yerba Buena Island, Part II

by Michael Wood

In the last issue, I presented a little of the colorful history of Yerba Buena Island (YBI) and hinted at the botanical treasures that have persisted, despite what seems like a concerted effort to remove what nature had intended. Those of you who attended the first annual CNPS walking tour of YBI on April 12 got a glimpse of the remnants of the natural plant communities that were once more widespread on the island, as well as of the overwhelming threats facing them. The goal of the tour and of this column is to point out what a centerpiece the island is, both geographically and botanically, and to build a constituency for the preservation and restoration of its remaining natural communities.

Despite a long history of human disturbance—mining, development, road construction, planting of invasive exotic plant species, and fire—YBI still supports several excellent examples of some of the San Francisco Peninsula's original vegetation types. Of special interest are stands of Coast Live Oak Woodland and Northern (Franciscan) Coastal Scrub. These vegetation types are similar to remaining stands still found in the city of San Francisco and are probably more closely related to the prehistoric flora of San Francisco than any other land mass bordering the Bay, with the possible exception of Angel Island. Some portions of these native plant communities are remarkably intact and may represent a very valuable genetic resource. Several plant taxa found on YBI occur in only very limited numbers in San Francisco, making them a potential source of genetically appropriate propagules for restoration efforts on the mainland. To date, I have recorded 105 native plant taxa at YBI representing 40 families and an additional 178 non-native plant taxa representing 48 families.

While no state or federally-listed endangered, threatened, or rare plant taxa have yet been found at YBI, numerous species of botanical significance were found. Perhaps of greatest interest is the presence of quite a few populations of dune gilia (*Gilia capitata* ssp. *chamissonis*). Within San Francisco, dune gilia occurs at several locations in the Presidio and one location in the Sunset District on Hawk Hill. It is restricted to sand hills and dunes between San Francisco and Bodega Bay. Dune gilia is currently being considered for placement on the CNPS List 1B, "plants rare, threatened, or endangered in California and elsewhere." A total of ten populations of dune gilia have been mapped at YBI, including two new populations found on the Coast Guard's portion of the island during our Easter tour. Other taxa of botanical interest detected include Dutchman's pipe (*Aristolochia californica*), large-flowered sand-spurrey (*Spergularia macrotheca* var. *macrotheca*), yellow bush lupine (*Lupinus arboreus*), stinging phacelia (*Phacelia malvifolia*), fiesta flower (*Pholistoma auritum* var. *auritum*), common montia (*Claytonia exigua* ssp. *exigua*). In addition, YBI supports numerous mature individuals of what are presumed to be indigenous coast live oaks (*Quercus agrifolia*), as well as oso berry (*Oemleria cerasiformis*), and some very large toyons (*Heteromeles arbutifolia*) and California buckeyes (*Aesculus californica*).

Other less significant but nonetheless unique features of the island's vegetation include dense stands of arroyo willow (*Salix lasiolepis*) resembling mangrove stands at the high tide line of Clipper Cove, a dense stand of giant horsetail (*Equisetum telmateia* ssp. *braunii*), no fewer than seven species of ferns including western bracken fern (*Pteridium aquilinum* var. *pubescens*), wood fern (*Dryopteris arguta*), western sword fern (*Polystichum munitum*), California polypody (*Polypodium californicum*), maidenhair fern (*Adiantum jordanii*), coffee fern (*Pellaea andromedaefolia*) and goldback fern (*Pentagramma triangularis* var. *triangularis*), and substantial populations of cobwebby thistle (*Cirsium occidentale* var. *occidentale*), blue dicks (*Dichelostemma capitatum* ssp. *capitatum*) and coyote mint (*Monardella villosa* ssp. *franciscana*).

To the best of our knowledge, these recent surveys represent the first detailed assessment of the flora of YBI. Because the island has been under control of the military, it has not been readily accessible to botanists for over 100 years. YBI could not be surveyed during preparation of the 1958 flora of San Francisco by Howell, Raven and Rubtzoff, and therefore was not included in the flora.

It is hoped that this first assessment of the remaining native vegetation of YBI will assist in the development of a Reuse Plan that recognizes the significance of the botanical resources on the island and provides for their preservation and ultimate enhancement. The transfer of YBI to the city of San Francisco offers a rare opportunity for the preservation of natural resources that have never been readily accessible to the general public, despite being situated in the center of a large metropolitan area.