

## THE ESTHETICS OF NATIVE PLANT REVEGETATION

Art Tyree

Say "native plants" to most urban Californians and you will get a variety of reactions. Many would draw a blank, never having given attention to their natural heritage. Others shrink back and say something about "brush," while still others think you are talking about scattered cactus baking in gravel. So regrettably little use has been made of the many horticulturally effective native species that the public in fact has not much experience with natives as "landscaping" material.

The professional sector has not been a great deal better in recognizing the high ornamental capacity of California plants properly used. A recent piece of public relations literature written by a landscape architect for a water agency in Orange County cautions the readers to be wary of planting many natives because of their rough, ungroomed appearance. Is this generalization justified? Can California native plants come through for us when we need a high degree of lushness as well as ruggedness?

True, our concern here is with revegetation as a utilitarian, rather than a cosmetic function, but there are some of our projects which, because of their relatively high public exposure, must have esthetic presentability. Such critical sites include slopes in residential developments, erosion control projects near public areas, and highway landscaping. Plantings which might stabilize soil effectively and grow successfully, yet offer only sparse ornamental effect will not be well received by the public in these areas. We need to develop a working knowledge of the esthetic component, along with other characteristics of various revegetation species.

But what is meant by "esthetics" in planting design? Identifying categories of esthetic effect, then learning how to implement them with regionally authentic plants will enable the landscape professional to succeed in both form and function. Major esthetic qualities that apply in our context are form, finish, color, and compatibility. These qualities are best understood if we not only define them, but illustrate them with exemplary native plants. As we view specific plants and plantings we can then develop planting schemes that capitalize on their inherent appeal.

The form of a plant is its most dominant sensory impact. Shape and position of trunk and branching, patterns of leaves and silhouette combine to produce the plant's overall architecture.

Viewing Torrey pine (*Pinus torreyana*), you can see how its form gives it a strong structural effect, yet with a mellow ambience.

An obvious geometrical shape is evident in incense cedar (*Calocedrus decurrens*), esthetically useful for bringing verticality to the landscape where appropriate.

Can there be a more majestic living monument than an oak tree? Note in Coast live oak (Quercus agrifolia) the massive arching of the limbs and the poetry of form in the canopy as seen from below.

Elegance of form is the mark of the manzanitas (Arctostaphylos spp.). These shrubs' bold branching foiled against the leaves suggest for them a use as medium scale accents.

Form can be significant in smaller plants, too, notably xerics and succulents such as Yucca whipplei and Agave shawii. This kind of bold structure is dramatic when punctuating a groundcover or massed planting.

In general, strong statements of form should not be made to compete with one another. Strongly architectonic plants, each having a clear visual impact individually, will produce only a jumble if clumped adjacent to each other. Esthetic focus is gained when a plant with bold form is allowed to make its statement against a non-competing background.

Finish in a plant is its overall richness of substance, texture and branching, foliage and flowers.

In sugarbush (Rhus ovata), for example, we see a high degree of finish in its leathery leaves of clear green and lustre imparted by the wax which protects the foliage from dehydration. Attractively evident, too, is the very dense covering habit of the leaves. Throughout winter these are augmented by the tight bundles of flower buds—an effect thoroughly the equal of the dressiest exotic shrubs on a plant rugged enough for any revegetation assignment.

Toyon (Heteromeles arbutifolia) is readily appreciated for its fine evergreen foliage of dark green. In toyon we notice an additional area of finish in the trunks, with their smooth, light grey bark contrasting with the dark foliage.

Coffeeberry (Rhamnus californica) is still another good, honest foliage shrub, dependable for its year-round finish. New leaves come out shiny, hardening to a more subdued tone.

Native trees to study for their quality of finish include coast live oak (Quercus agrifolia) with its somber toned evergreen foliage, enlivened in spring by bright new growth and flowers; the substantial dense foliage of California bay (Umbellularia californica); and the various pines, such as Parry pinyon (Pinus parryana) which presents a dense cover of short needles through the hottest drought.

Color is what puts the sparkle in a revegetation planting. Even those among the public unable to respond to the subtleties of form and finish will notice a display of color. Ornamental color can come in the form of flowers, fruit, or seasonal foliage coloration. There are native plants of various sizes that produce as much seasonal color as familiar exotics.

Probably our best known color shrubs are the Ceanothus. Plant habit and size depend on the species, but all produce a spring floral show in variation on

a theme of blue. Some have white flowers. With many ceanothus species, foliar finish diminishes somewhat over the summer season, though that process can be compensated for by careful placement and combination with other shrubs of more consistent finish.

Yellow blossoms along the stems of Nevin mahonia (Mahonia nevinii) brighten the shrub's all-year blue-green foliage color. Incidentally, Nevin mahonia illustrates the "double color" effect produced by flowers and fruit which are both ornamental; the berries are shiny, red and numerous.

Spectacular is the word for matilija poppy (Romneya coulteri) in flower—huge, crepe-papery white flowers with yellow stamen clusters appear in late spring on seasonal growth from a perennial rootstock. Due to its seasonal growth habit, it has good finish only through the end of the flowering season.

Smaller plants, too, produce a good deal of color in the native revegetation planting. Encelia californica, the coastal sunflower bush, produces a wealth of yellow daisies over a long spring season. The plant holds presentable finish as long as it gets water, then fades in the late summer drought unless irrigated.

Monkey flower contributes plenty of color throughout late spring and early summer, buff orange from Mimulus longiflorus, or red from Mimulus puniceus. These are seasonal effect plants; they want to go on vacation late in the summer and should be placed accordingly in the landscape.

Hummingbird flower (Zauschneria californica) is a sensational small color producer at a rather uncolorful season native plant-wise—late summer and early autumn. The greyish foliage develops into a presentable groundcover from the spreading and colonizing roots. Flowers are brilliant scarlet.

A variety of species with worthwhile color features do not have year-round lushness. Such plants can still be effective in the high-visibility landscape if they are combined with facer plants of evergreen habit, or interplanted with substantial foliage shrubs.

In considering compatibility, we examine the landscape as the sum of its parts. Various features of form, finish and color in each of the component plants play off one another in ways that determine the degree of harmony developed in the planting. The great esthetic advantage of native plants arises from their inherent compatibility with the California environment, as well as their congeniality with each other.

Not to be ignored is the importance of external harmony—the interface between the designed revegetation and the surrounding naturally occurring vegetation and other local features. Professor Russel Beatty of the University of California, Berkeley, refers to what he terms "visual authenticity", the propriety of plant forms in the context of a given area. He illustrates the concept by citing the introduction along a highway in northern California of spire-like coast redwood trees adjoining an oak woodland community, in which the visual theme is one of rounded plant forms.

Achieving esthetic as well as functional compatibility in revegetation requires a working knowledge of plants and plant communities. Observing natural communities, the revegetation planner will notice toyon, manzanita, buckwheat and buckthorn growing together on the slopes, while down in the canyons sycamores, alders, and gooseberry thrive. In dry mountain escarpments he may notice pinyon, sugarbush and antelope bush (Purshia glandulosa) in an attractive combination. Many other field studies could illustrate. Natural communities will suggest plant palettes for design. One esthetic observation will be significant throughout: species that are adapted to grow in the same habitat generally are attractive together.

To illustrate principles of esthetics with native revegetation, we examine a typical attempt at ornamental revegetation with exotic plants, then how such a project could be salvaged by the proper use of native plants. A typical and regrettably state-of-the-art greenbelt or slope stabilization planting in coastal to intermediate valley areas would consist of the following:

Canopy Tree: Eucalyptus polyanthemos or E. rudis  
 Evergreen Tree: Pinus halepensis  
 Shrubs: Acacia latifolia, Xylosma congestum  
 Groundcovers: Delosperma alba, Gazania

These are all good plants as exotic landscape ingredients, but the overall effect of such a planting scheme is that of a pasted-on patchwork. The resulting plantscape, though it will grow (with some coaxing from irrigation), never really knits into California, made as it is of remotely-derived elements.

Now we will see if we might overcome these esthetic aberrations by using a native plant palette. A sample palette follows, with esthetic principles illustrated. Potential ornamental natives are many; actual species used in a given planting would be determined by functional and environmental factors, as well as specific esthetic effect desired.

As a major canopy tree we use coast live oak (Quercus agrifolia). Stout, arched branching and wide domed silhouette endow the oak with a strong monumental form with which to anchor the planting.

Accompanying the oaks will be Torrey pines (Pinus torreyana), whose billowing, grey-green growth contrasts pleasingly with the dark solidity of the oaks.

Again with the foliage shrubs we gain a year-round harmonious contrast of color and form from the mellow green spreading mass of lemonade berry (Rhus integrifolia) planted with toyon (Heteromeles arbutifolia), with its upright crown of dark green foliage. Strategic seasonal color comes from the toyon's red berries.

Two kinds of color plants perk up the planting. Coast sunflower bush (Encelia californica) shows abundant yellow daisies over a long spring season; these are employed in massed colonies among the larger shrubs. Matilija poppy

(Romneya coulteri) will add a dramatic dimension to the project when it flowers. We might have added color, too, with some Ceanothus interplanted with the major shrubs.

Deep-rooted groundcovers round out our sample palette. Iva (Iva hayesiana) builds up a carpet of green while demanding little in return. Scarlet flowers brighten the grey-green growth of hummingbird flower (Zauschneria californica), making it a color accent as well as a small scale groundcover.

Esthetically, the trees and major foliage shrubs in our sample palette "carry" the planting with their all season high finish. Seasonally, various color components show: Encelia and Heteromeles (flowers) in spring; Romneya and Zauschneria in summer; and Heteromeles berries through the winter. Colors are harmonious with each other. Most importantly, such a planting maintains good lushness and presentability while establishing continuity with the real California surrounding it.