



Ecological Concerns Incorporated

Central Coast Wilds

Restoring the habitats that sustain us



CCW-Newsletter

March 2011

"Our mission is to nurture ecological relationships, cultivate community partnerships and build sustainable business practices in order to protect and restore biological diversity."

In This Issue

[Current Sales Flyer](#)

[Plant of the Month](#)

[Bioswales & Rain Gardens For Storm Water Management](#)

[Discount Offer](#)

[Coming Events](#)

[Featured CCW Products](#)

[Other Services](#)

Current Sales Flyer

Be sure to check our nursery highlight list with special prices on plants from our stock of over 320 native species.

[March Sales Flyer](#)

We can deliver large orders. Fee varies, inquire with our nursery staff.

www.centralcoastwilds.com

Plant of the Month

Name/Species:

Woodland Strawberry,
Fragaria vesca

Family:

 Rose (Rosaceae)

Relatives:

 Beach Strawberry

(*Fragaria chiloensis*),
Potentilla spp.,
Horkelia spp.

Range:

 Northwestern

California, Cascade Range, Sierra Nevada, Central Western California, San Bernardino Mountains, Peninsular Ranges, to eastern North America, Baja California, also Europe.

Description: The hardy perennial stays low to the ground, reaching a height of 10" and spreading out via runners. The plant gets its name from these runners, with straw coming from the word strew, in reference to the way that the stolons strew themselves across the ground. Delicate white flowers bloom in May through August, producing small, fragrant, dark red berries that ripen on the plant yielding an intensely sweet late-summer treat.

Garden Use: The woodland strawberry is a wonderful multi-use California native, perfect as a groundcover in shady garden areas. In the garden combine with Yerba Buena (*Satureja douglasii*) and Western Dog Violet (*Viola adunca*) for an edible low-growing ground cover.

Habitat Value: The delicious fruits attract native birds and small mammals as well, so it is a good idea to harvest as soon as the berries ripen, or to cover with bird netting. Deer will also munch on the leaves if given the chance.

Food & Medicinal Values: In addition to being a good source of vitamin C and antioxidants, both the berries and the leaves of the woodland strawberry act as a natural bleach, whitening tooth enamel as well as preventing the buildup of tartar. The leaves and roots were used as far back as the Middle Ages for tooth and gum health. All parts of the plant have been used medicinally, as digestive aids (roots, stalks), astringents (leaves), and antibacterial salves (leaves, juice).



Discount Offer

25% off Landscape Design Services when CCW installs the work.

Wholesale native plant prices when CCW installs the plants.

Coming Events

3/26 - [Central Coast Home & Garden Expo at the Coconut Grove](#)

3/29 - [CLCA Central Coast Chapter Supplier/ Membership Night](#)

4/16 - [CNPS Native Plant Sale at Hidden Villa Ranch](#)

4/17 - [Going Native Garden Tour](#)

5/1 - [Bringing Back the Natives Garden Tour](#)

6/12 - [Santa Cruz Native Garden Tour](#)

Learn More About Us

Office: 831.459.0656
Nursery: 831.459.0655
Fax: 831.457.1606

[Driving Directions](#)

[Online Native Plant Inventory](#)
(call to confirm availability)

Bioswales & Rain Gardens for Stormwater Management

by Josh Fodor

Bioswales and rain gardens are landscape features that are designed to manage storm water. Their primary benefit is the effective treatment of pollutants that runoff rooftops, driveways and other paved surfaces. Additional benefits include groundwater recharge, wildlife habitat and aesthetic interest. A wide variety of California native plants are adapted to the seasonally wet soils characteristic of bioswales and rain gardens. The proper selection of native plants enhances the treatment of polluted runoff and adds to the diversity, wildlife value and beauty of the landscape.

Bioswales are broad, shallow channels designed to convey, filter, and infiltrate storm water runoff. Typically they are designed to transport water to rain gardens or larger storm water wetlands. They also can be used to filter storm water before it enters a storm drain, natural area or stream. Depending upon the available space, a swale may have meandering or nearly straight channel alignment. Meandering swale geometry maximizes the time water spends in the swale, which aids the trapping of pollutants and silt.

Bioswales may be planted with grasses and flowering perennials plants. Native grasses such as meadow barley (*Hordeum brachyantherum*), creeping wildrye (*Leymus triticoides*) or common rush (*Juncus patens*) are versatile species that can survive temporary flooding as well as long dry period. California aster (*Aster chilensis*) and golden eyed grass (*Sisyrinchium californicum*) are colorful flower perennials that can also withstand intermittent wet and dry conditions.



Featured CCW Products

Native Sod: Six Drought Tolerant Blends to Choose From @ \$1.99 SF

Custom Native Seed Blends for Landscape & Erosion Control

Root Guard: Gopher Protection Plant Baskets: 1 - 15 Gallon Sizes

Organic Fertilizer and Mycorrhizal Packets @ \$0.50/packet

Other Services

Available from Ecological Concerns Incorporated:

- Complete Landscape Design & Installation Services
- Irrigation System Design, Installation & Service
- Erosion Control Plans: CPESC on Staff
- Grey Water Treatment Systems: Certified Installers on Staff
- Sustainable Landscape Maintenance Service

www.centralcoastwilds.com

Rain gardens are located in close proximity to the roof drains and are designed to treat small volumes of runoff. A rain garden consists of a shallow basin where runoff temporarily ponds and seeps into the soil over several days. The basin and surrounding area can be planted with a diversity of native species including: creeping spikerush (*Eleocharis macrostachya*), western goldenrod (*Euthamia occidentalis*), rosilla (*Helenium puberulum*), California tiger lily (*Lilium pardalinum*) and scarlet monkeyflower (*Mimulus cardinalis*).

The proper function of both bioswales and rain gardens is greatly enhanced by the use of bioretention media. Bioretention media is a designed soil composed of 50% sand, 30% loam soil and 20% shredded hardwood mulch. The bioretention media enhances water retention capacity, infiltration, and nutrient and pollutant removal. Infiltration may be further enhanced by adding gravel or other permeable material below the bioretention media.

Rain gardens and bioswales do have some limitations that restrict their application. They should not be located on sites where the soil has not been stabilized, as large quantities of sediment will rapidly diminish their capacity. Also, sites with compacted or clay soils may require additional excavation and use of gravel or sub-drains. Finally, relatively flat sites are required in order to slow the water and accommodate runoff filtering through the system. Slope modifications such as berms or low retaining walls can allow for their use on moderate slopes, but steep slopes are not recommended.

In order to ensure proper function of bioswales and rain gardens they should be inspected regularly to insure that there is not excessive sediment buildup, and that there is a dense vegetative cover.

For a more complete discussion of the use and benefits of these systems download a copy of the storm water management guide *Slow it. Spread it. Sink it!* from www.rcdsantacruz.org. For more information on native plants selection download Central Coast Wilds's bioswale and rain garden guides: www.centralcoastwilds.com/ecological_landscaping.htm

Josh Fodor is the owner of Central Coast Wilds and he teaches at the Cabrillo Environmental Horticulture Program. Central Coast Wilds is a California native plant nursery and landscape contracting firm which specializes in the design, grow and build of ecological landscapes projects for residential and commercial clients. Contact Josh by email: jtfodor@centralcoastwilds.com