



Wetland Plants
of the
Sacramento Valley and Lower Foothill Region
Virginia Dains, Dr Bob Holland, and Dr Jeff Hart
May 20-22, 2008



TARGET AUDIENCE: Professional botanists, ecologists, wetland scientists, land managers, resource specialists, and conservationists. Participants should have an initial understanding of plant terminology and basic plant identification skills.

COST: CNPS members: \$360
Non-members : \$385

Register at <http://cnps.org/cnps/education/workshops/index.php>

REDUCED OR WAIVED FEES: One or more spaces are available through our [Work Exchange Program](#) for this workshop. These are awarded on a first come/first serve basis to CNPS members who earn less than \$30,000 per year.

INSTRUCTORS

Virginia Dains Consulting botanist and plant ecologist, Geobotanical Phenomenologist

Dr Bob Holland, Geobotanical Phenomenologist

Dr Jeffrey Hart Owner and president of Hart Restoration and Hartland Nursery

LOCATIONS The class will include two day-long field sessions in lower foothill and upper valley habitats and a final day touring a wetland plant nursery and aboard a floating classroom in the Sacramento-San Joaquin Delta.

COURSE DESCRIPTION: This short course on wetland plant identification in the Sacramento region will examine a range of common wetland habitats from seasonal wetlands of the lower foothills to the freshwater marshes of the Sacramento-San Joaquin Delta. The course is specifically designed for environmental consultants or agency staff undertaking wetland delineations using Corps of Engineers hydrophytic vegetation criteria and the FWS National List of Plant Species that Occur in Wetlands.



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ATTENDEES WILL:

- Learn to identify dominant wetland plants including difficult genera such as *Cyperus*, *Scirpus*, *Juncus*, *Carex*, and grasses,
- Learn tricks and tips on identifying wetland plants outside of their flowering season (also known as cadaver and fetal botany),
- Become familiar with the ecology and life histories of key wetland species and how these may affect the interpretation of the hydrophytic vegetation criteria when applied to the delineation of wetland habitats,
- Become familiar with taxonomic synonymy of wetland species and sources of additional resources for plant identification, and
- Be introduced to the requirements for nursery production of wetland plants used in revegetation or wetland mitigation projects.
- Receive a certificate of completion for the course from CNPS, after successfully completing a short exam/exercise





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INSTRUCTOR BIOGRAPHIES:

Virginia Dains has worked as an independent plant ecologist for 20 years mapping vegetation, rare plants, and wetlands. She has also been an active volunteer in natural history docent training, lay-person and school field trips, and has led or participated in technical training in wetland plant identification, and wetland delineation classes for US FWS and the Army Corps of Engineers. She has written and illustrated taxonomic keys and reference guides for the non-botanists. For Virginia, every plant has a story along with a name, some of which are actually true, but none of which are forgettable.

Dr Bob Holland has studied California plant life since arriving at UC Davis for graduate school in 1972. Early work in vernal pools expanded into the broader realm of vegetation, culminating in his 1986 "Preliminary descriptions of California natural communities", the first bibliographically driven classification of California vegetation types. He has studied sensitive plants in every California county (except Del Norte) and has mapped more than 30,000,000 acres of vegetation. An outside-the-box thinker, he enjoys integrating seemingly disparate disciplines ranging from population genetics to plate tectonics in interpreting California plant life.

Jeffrey A. Hart, Ph.D. (Captain Tule) is owner and president of Hart Restoration and Hartland Nursery, located in Walnut Grove, California. Jeff holds bachelor and master degrees in botany from the University of Montana, and a Ph.D. in biology from Harvard University. Hart Restoration is a design/build restoration company that specializes in riparian and wetland habitats, erosion control projects, and includes a native plant nursery. Other enterprises include Delta Ecotours and organic vegetables.



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PRELIMINARY AGENDA

Day 1, Tuesday May 20

Meet in Cool at southern entrance to Auburn State Recreation area

8:30 Walk to seasonal wetlands

Lunch in the field

Continue to explore seasonal wetlands and possibly streamside habitats.

4:30 adjourn

Day 2, Wednesday, May 21

Meet at the barn at the Cosumnes River Preserve

8:30 Review session and landscape talk by Dr. Bob in the barn. Walk to seasonal wetlands habitat

Lunch in the field

Continue walk to riparian habitats

4:30 Adjourn

Day 3, Tuesday May 22

Meet at Hartland Nursery, Walnut Grove

8:30 Tour of the Tule Wilderness in the Sacramento-San Joaquin Delta on board the Tule Queen II

Lunch on board

Willow walk

Tour of Hartland Nursery to see many labeled wetland plants and learn about revegetation and mitigation projects

3:30 Short exam and evaluations

4:30 Adjourn



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EQUIPMENT LIST

Please bring the following

Hand lens
Clipboard
Notebook and pencil
Sturdy boots and field clothes
Clothing appropriate for the weather and conditions
Water & snacks for field days
Camera
Binoculars

LOCATIONS

Cosumnes Preserve, Galt
Auburn State Recreation Area
Hartland Nursery, Walnut Grove

MATERIALS AND RESOURCES PROVIDED

- Illustrated identification guides, keys and references will be provided.
- Transportation to the field locations

Workshop will be held rain, shine, or wind

To register or out more about other workshops visit our website at <http://cnps.org/cnps/education/workshops/index.php>. For further questions contact Josie Crawford at jcrawford@cnps.org or call (916) 447-2677 ext 205.