



once a major component of the Willamette Valley landscape, but it has been particularly susceptible to 'development pressure' since settlers arrived. In the foothills & uplands, it has succumbed to housing & faster-growing timber; in the valley floor, to agriculture.

Although all the distinctive local habitat types have been identified in some way, shape

or form, as wildlife conservation priorities, the 'oak belt' has excited particular attention among a great variety of interested parties. Such broad, interdisciplinary interest in the welfare of the oak reflects the breadth & depth of this tree's abiding influence. What do I mean?

A CORNERSTONE OF BIODIVERSITY

For complicated reasons, natural environments which tend toward harsher extremes often demonstrate greater biodiversity than less 'pressured' habitats.

For example, in our local 'old growth', we might see a dense, lush mass of life, even as the diversity it represents is measurably less than that of the open, 'emptier', dryer ecology of the oak woodland & savannah.

The web of interrelationships associated with *Quercus garryana* itself, is mind-boggling. It provides some degree of habitat for over 200 species of vertebrates, including but by no means limited to: birds, squirrels, bats, snakes, lizards, lichenologists, entomologists & mycologists - as well as a host of invertebrates, and others. *Quercus garryana* is the 'keystone' species of its world.

This explains why a disproportionate number of critters officially listed as locally 'threatened or endangered', have close associations with *Q. garryana*. These include the Western grey squirrel, the white-breasted nuthatch, the western bluebird, the Kincaid lupin, the Willamette Valley daisy & the meadow checker mallow. Some relationships are wholly specific to the plant - the *Propertius* dusky wing butterfly chooses the tree as its larval host. There are others.

Simply put, where the oak goes, so goes our ecosystem.

RESOURCES: Finn Po - Finnpo@efn.org

- ▲ "Restoring rare native habitat in the Willamette Valley" by Bruce Campbell. Available online at: www.biodiversitypartners.org
- ▲ "Landowner's Guide to Restoring & Managing White Oak Habitat" by Veselig & Tucker. Oct 2004. Available free from the BLM.

THE LONG VIEW

Whereas the global trend toward unrelenting species extinction holds true for this bioregion, as elsewhere, sound conservation efforts are gathering impetus. Slowly, know-how & resources to regenerate *Q. garryana* habitat is coming together. A couple of excellent texts, freely available online, lay out the wherefores.

And propagation techniques have improved markedly in recent years. It used to be a nurseryman's master that attrition rates for oak transplants were so high as to make the process a reliable loss-maker. But nurseries have learned that by growing up and moving the trees every 1-2 years, they can keep the root ball compact until it is time to burlap-move to a permanent position. The strategy works: several regional nurseries offer the trees inexpensively.

Getting oak trees started at home is as easy as planting an acorn in a pot, or the ground. But the young plant will need care.

Hungry critters will dig the acorns up, and deer, among others just love the young saplings. The plants appreciate watering in their early year(s). Pre-soak acorns 24-48 hours. Seed 4 & thin.

Changing the watering regimen of mature trees (with the installation, nearby, of a manicured lawn, for example) will result in the tree's slow decline. Resist the temptation to water an established tree looking scruffy by summer's drought. The tree is doing its thing.

Some believe that the oak's high drought-tolerance derives from its thick, leathery leaves, which reduce transpiration; and the tree's strategy to grow 'slow & long'. The oak doesn't commit itself to any one year.

Education efforts continue apace. The Eugene Tree Foundation's present 'Legacy Tree Program' which seeks to identify trees of significant cultural interest, has a soft spot for oaks - a contemporary, secular interpretation, perhaps, of a very ancient tradition beholden to all cultures of recognizing certain trees, or stands, as, quite simply, especially sacred.

Perhaps this, then, is the great secret, quiet strength of our local oak. Its presence is gifting us an opportunity for a qualitative shift in our sense of aesthetics - to broaden our perception of life to embrace a deeper understanding of, and respect for, the web of interrelationships which support us all. What's more, as permaculturists, we perhaps see more clearly than most, that the distinction between 'ecological restoration' and the birth of a sustainable local foodshed, is entirely artificial. As Herman Hesse put it, "My soul turns into a tree."

- ▲ "Life of an Oak" by Glenn Keator. Heyday Books, California Oak Foundation, 1998.