

PIONEERS OF THE WILDERNESS

The mineral-rich soils of the Siskiyou Mountains have given rise to a distinctive range of plants. **Roy Lancaster** goes prospecting for treasure in this unspoiled part of the Pacific Northwest. Photography by Roy Lancaster

IT WAS AN INSUFFERABLY hot day to be driving down Interstate 5 in the state of Oregon, USA, in September last year. In fact, it was an insufferably hot day to be driving anywhere, but our guide and driver Sean Hogan had supplied us with enough snacks and water to survive Death Valley if need be, while his stories of the plants we should soon be seeing kept us alert (and our expectations rising) as we endured mile after mile of heated highway.

My wife and I had arrived at Sean's home in Portland the day before. We had first met him at a symposium in Philadelphia in 2008 when, having regaled us with stories of his travels around America's west coast, he invited us to join him on a trip to the Siskiyou Mountains, which straddle the border of southwest Oregon with northwest California. It is a region known for its interesting flora, especially of woody plants, and has many rare and endemic species, including insectivorous perennial *Darlingtonia californica* (cobra lily) and elegant *Picea breweriana* (Brewer's weeping spruce), large examples of which in UK cultivation never fail to attract the admiration of all who see them.

Sean's offer proved irresistible when subsequently I was invited to speak in Seattle and Portland, both areas well known for the quality of their gardens and nurseries (and the friendliness and hospitality of their garden fraternities). Sean, a plantsman and author, runs the acclaimed Cistus Nurseries just outside Portland, specialising in, among others, plants of the US southwest and Mexico.

Taking to the hills

Our first contact with native plants came on a roadside stop, seeing some of the conifers for which the region is justly famed, including majestic *Pseudotsuga menziesii* (Douglas fir), *Calocedrus decurrens* (incense cedar) – its soft, non-splintering wood prized for making pencils – and upright *Pinus ponderosa* (western yellow pine). We also saw *Acer macrophyllum* (big leaf maple), *Arbutus menziesii* with peeling red bark, and the large, milky-blue fruiting heads of *Sambucus nigra* subsp. *caerulea* (blueberry elder).

Towards the end of the afternoon we pulled off Interstate 5 at Grants Pass, and headed west along the Redwood Highway to the small town of Cave Junction, where we were to spend the night. For what remained of that day and all the next we explored the nearby mountains, thankful that Sean had hired a four-wheel-drive vehicle to tackle the steep, deeply rutted, dusty old logging roads. The temperature stayed high, and the dry, boulder-strewn, pine-scattered mountain slopes reflected the blinding sun except where denser forest occurred.

The Siskiyou Mountains lie between the Coastal Range in the west and the Cascade Range to the east; to the north they are bounded by the Rogue River and in the south, the Klamath River. They have been described as a confusion of broken mountain ranges with steep, stony slopes and scanty soil. They have a complex geology including areas of porous serpentinite rocks. Together with the relatively high summer temperatures and long dry season, the result is ►

BLAZING THE MOUNTAIN TRAIL

Plants need to be tough to prosper in the Siskiyou Mountains, facing poor soils, low rainfall and deep winter snow. Conifers take such problems in their stride, though they may succumb to the occasional forest fire

rather arid conditions for plants. Serpentine rocks have levels of metals (especially nickel, chromium and cobalt) that are high enough to be toxic to many plants, and particularly low levels of two major plant nutrients, potassium and phosphorus. The low, slow-growing, drought-resistant flora able to survive in the soils of such areas has earned them the name ‘serpentine barrens’. The barrens are relatively poor in diversity, but contain some rare and endemic species found on few other soil types.

Deep into the hills

The highest point in this rugged region is 2,500m (8,200ft); above 1,000m (3,300ft), winter snows of considerable depth regularly occur. The highest altitude we achieved was a ridge at 1,487m (4,880ft), where we observed the devastating effects of a forest fire, the bleached white spires of dead conifers remaining upright five years later, like a ghostly skeletal army.

On first entering the mountains, I was struck by the distinct areas of vegetation: patches of trees, and areas of shrubs and perennials betraying differences in moisture, soil type and soil depth. The herbaceous species were less obvious now in September than they are in early summer, when there is a host of colourful wild flowers. Of the trees, conifers are by far the most notable, dominating the landscape, especially on slopes and ridges, whereas the vast, dry, rocky spaces in between, right up to the ridges, is mainly populated by scattered, largely evergreen scrub.

Where rivers and streams occur the landscape is often greener and it is here, in bogs and seepages, that we found *Darlingtonia*, their erect, green, curiously hooded and serpent-tongued pitchers glistening in the sun, sometimes in extensive colonies, accompanied by white-flowered *Parnassia californica* (bog star or California grass of Parnassus) and the orange seed-spikes of *Narthecium californicum* (California bog asphodel). In colourful contrast were low, pink-flowered, loose hummocks of *Epilobium illinoensis*, a willowherb, in stony creeks.

Apart from *Mahonia pumila* and, new to me, *Garrya buxifolia* (dwarf siltassel) the low scrub consisted mainly of evergreen oak and oak relatives adapted to survive the poor, serpentine-derived soils. Principal among them was *Quercus sadleriana* (deer oak) that rarely tops 1.8m (6ft), some fire-damaged clumps showing rich green regrowth; smaller, shining green-leaved *Q. vaccinifolia* (huckleberry oak), its acorns relished by the local black bears; and *Lithocarpus densiflorus* var. *echinoides*, a dwarf variety of tanbark oak with blue-green leaves and distinctly blue-bloomed acorns. Accompanying them was a dwarf, bushy type of aromatic *Umbellularia californica* (Californian bay), once used medicinally by American Indians, and a free-fruited buckthorn variety, *Rhamnus californica* var. *occidentalis* with big, sage-green, evergreen foliage.

Equally common, and of particular interest

to Sean, who studies and grows them, was a host of *Arctostaphylos* species and hybrids – shrubby, evergreen manzanitas – outstanding among which were *A. canescens* and *A. viscida*. Their grey to sea-green foliage, red fruits and gorgeous, tawny-red older stems have great ornamental potential, especially for gardeners in dry areas.

Top for conifers

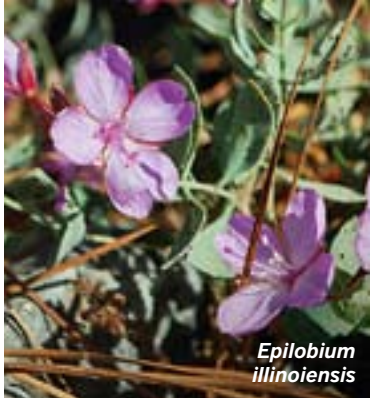
The western mountains of the USA remain a stronghold of conifer diversity. Of the 17 different conifers recorded from the Siskiyou, space allows me to mention just a few. Apart from giant Douglas fir – which, in other areas with wetter and deeper soils, can top 90m (300ft) – was *Chamaecyparis lawsoniana* (Lawson’s cypress), the parent of many a dwarf and slow-growing cultivar, but here taller, with straight, pine-like trunks and dark green foliage. Often it lives alongside incense cedars, not always as narrow in the wild as trees usually are in cultivation, and taller *Pinus jeffreyi*, a handsome pine similar to *P. ponderosa* but now recognised as distinct, the bark of which has a vanilla scent.

Pines are particularly well represented in the Siskiyou – bristlecone pine country is not far away and their close relative, long-lived *P. balfouriana* (fox-tail pine) is native to the adjacent Klamath Mountains. Many of these conifers were introduced to cultivation by John Jeffrey, David Douglas and William Lobb in the 19th century. We saw *Pinus attenuata* (knobcone pine), which reaches a ‘mere’ 25m (80ft); *P. monticola* (western white pine); tall, straight-boled *P. contorta* var. *latifolia* (lodgepole pine) and yet more *P. ponderosa*. King of them all, however, for me was *P. lambertiana* (named sugar pine for the sweet fluid its bark exudes), whose soaring stems, spired crown and long, horizontal branches, drooping at their extremities, held impossibly long 50cm (20in) slender cones. I was reminded of the scary experience that Douglas had endured with hostile Indians while gathering its cones, which also was in September, but in his case in 1826.

Reaching the summit ridge of one mountain on the evening of 8 September, we were presented with what I can only describe as a conifer-lover’s nirvana. The ridge was dominated by *Abies magnifica* var. *shastensis* (Shasta red fir), their upper branches sporting huge honey-brown cones with spiralling bracts. But even better were wild *Picea breweriana* (Brewer’s weeping spruce), coneless and less-manicured than the pampered examples of British parks and gardens but wonderful nonetheless, and all the more memorable for being endemic only to the Siskiyou and Klamaths, at home here, clinging to the top of the world.

Such was our joy that we ignored the approach of night, returning, eventually, from a now orange sun-stained ridge through the increasing gloom to enjoy a welcome meal, followed by dreams of strange mountains. ■

Roy Lancaster VMH is a member of the RHS Woody Plant Committee



Epilobium illinoensis



Sambucus nigra subsp. *caerulea*



Darlingtonia californica



Arctostaphylos canescens



Pinus lambertiana

LOCAL HIGHLIGHTS

Roy saw many plants of ornamental merit in the Siskiyou Mountains:

- Willowherb *Epilobium illinoensis* forms low, pink-flowered hummocks.
- Its fruit gives the name blueberry elder to this American subspecies of familiar *Sambucus nigra*.
- Preferring damp spots, the hooded pitchers of cobra lilies (*Darlingtonia californica*) trap insects.
- Sugar pine (*Pinus lambertiana*) stands out in an area famed as a centre of coniferous diversity.
- Manzanitas (*Arctostaphylos* species) are not widely grown in Britain but would do well in dry gardens with their blue-green foliage, red fruit and striking bark.
- The glaucous, acorn-like fruit of *Lithocarpus* hint that it is closely related to oaks – several shrubby species of which grow in the Siskiyou



Arctostaphylos viscida



Lithocarpus densiflora var. *echinoides*

Running roughly north-south for about 100 miles (160km) across the Oregon-California border, some 50 miles (80km) from the sea, the Siskiyou Mountains are in a region rich in endemic plants



• Siskiyou Mountains