

A Unique Fescue Bunchgrass in California: *Festuca X*

by David Amme

"When we try to pick out anything by itself,
we find it hitched to everything else in the Universe."

-John Muir-

About 15 years ago while exploring the unique blue forms of red fescue (*Festuca rubra*) of the Mendocino Coast at Jug Handle State Preserve I collected a mixed bag of seed from several locations between Jug Handle and the bluffs just north of the Navarro River. On these foggy, wind blown sites one can never be sure how good the seed will be. Being an obligate out-crossing grass, growing in patches that are often clones that could be hundreds of years old, the chances of successful fertilization is iffy to say the least. I dutifully planted my bag of seed in a flat and was rewarded with a batch of steel blue red fescue seedlings, which I grew up and gave to my horticulturalist friends. From this batch of plants the blue "Jug Handle" cultivar soon spread into the nursery trade. Among the original batch of seedlings I found 14 individual fescues that were totally different. They were a blue-green form of a fineleaf bunchgrass fescue; definitely not a creeping red fescue and definitely not Idaho fescue (*F. idahoensis*). I multiplied each plant by divisions and planted them in rows at my experimental Gill Tract garden in Berkeley hoping to harvest some seed with the goal to gradually increasing the line. Alas, no matter how hard I tried I was only able to collect a small amount of seed. I kept crossing the seed, always maintaining the line but never was able to amass enough seed for a large increase plot.

A few years later, Walter Earl, proprietor of Mostly Native Nursery in Tomales, independently selected out a single unique fescue from a bag of Idaho fescue he purchased from Judith Lowery of Larner Seeds. This seed was collected in the large well known Idaho fescue stand on the island in the center of Nicasio Reservoir in Marin County. Walter's plant was the same as mine, which he clones from division and labels it as a coastal selection of Idaho fescue.

So, what is this plant? It's not an Idaho fescue. The lemma and awns of the mystery fescue are too short and the panicle too small. Unlike Idaho fescue, the mystery fescue has no tendency to be summer dormant. While Idaho fescue languishes in a container and eventually rots out, the mystery fescue just keeps on growing, gradually expanding to the edge of the container. I have one 14 year-old plant that is cracking a plastic gallon can. It is obviously a very long-lived grass. Could it be the introduced hard fescue (*F. trachyphylla*)? There are definitely some similarities and may in fact be difficult to separate in a fescue key. Growing side by side the mystery fescue and hard fescue are very different. This is when things really get confusing.

In The Manual of the Grasses of the United States (Hitchcock and Chase 1950), A. S. Hitchcock describes *F. ovina* as a native grass and lumps our native alpine fescues (*F. saximontana*, *F. minutiflora*, and *F. brachyphylla*) into this taxa. The mystery fescue is certainly not the European blue *F. ovina* sold in the nursery. Finally, there is the recently recognized form of Idaho fescue (*Festuca idahoensis* subsp. *roemeri*) which I have been applying to the Idaho fescues in California west of the Cascades and Great Basin (i.e., north coast range, northern Sierra Nevada). Perhaps the most knowledgeable fescue expert is Susan Aiken from the Research Division of the Canadian Museum of Nature. Aiken and her colleagues M.J. Dallwitz,

C.L. McJannet, and L.L. Consaul are authors of the *Festuca* of North America web page (1996 onward). Checking out the web page one can read the descriptions and view the distribution maps of all the fine-leaf fescue species. Viewing the distribution map of *F. idahoensis* subsp. *roemerii* it becomes obvious that Aiken does not consider California's west side Idaho fescues as the *roemerii* subspecies. In fact the distribution map, albeit incomplete, tells another story that may be the key to what this bunchgrass really is.

So far I have the plant but no location. And the only way to resolve its true identity is to find it in the wild. Then I met Nate Bensesi, who use to work at the Mendocino Coast Botanical Garden in Fort Bragg. I told him my story. He mentioned that he had seen an interesting fescue of the same description near Point Cabrillo and sent me a map. Finally, I had a location—a place to visit. On a rocky outcrop just below the second terrace, there it was. Definitely a native grass, definitely not the west-side Idaho fescue. It may in fact be the true *roemerii* subspecies of Idaho fescue—definitely a range extension deep into California. The best part of this 15-year saga is I now have the visual gizz. I've got the Gestalt. And I am relatively confident that we will find more sites perhaps all the way down the coast to Marin County.



Festuca X on a knoll at Point Cabrillo overlooking the Pacific Ocean.

Festuca X brings up important issues as to the relationship of the two forms of Idaho fescue and the possible relationship of other native fineleaf bunchgrass fescues of the Pacific slope. From a California point of view, the Great Basin Idaho fescue is definitely a different ecotype from Idaho fescues found in the northern Sierran Nevada and North Coast Range. A. S. Hitchcock's recognition of the European *F. ovina* in North America may make some sense. In the Flora of the Pacific Northwest Leo Hitchcock and Arthur Cronquist (1987) also recognize *F. ovina*. *Festuca X* could very well be a coastal ecotype of the alpine *F. ovina* var. *brevifolia* (aka *F. brachyphylla*). After all, *Phleum alpinum*, *Deschampsia caespitosa*, *Festuca rubra*, and other grasses as well as woody and herbaceous taxa are found on the coast as well as in montane and

alpine settings of the Sierra Nevada. The answer to this puzzle may be found in the mountains of Vancouver Island in British Columbia and the exposed southwest coasts of the southern San Juan Islands and the Olympic Range of Washington State. You can bet we will be taking herbarium specimens of the mystery fescue and sending them to key herbaria for evaluation and identification.



The knoll with sandstone outcrops where *Festuca X* resides.



Close-up of *Festuca X* bunchgrass

Literature Cited

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