

THE DISCOVERY OF THE COLD WATER CORYDALLIS
Corydalis aquae-gelidae

TO: United States Forest Service
Clackamas Ranger District
Estacada, OR 97023

June 15, 1994

The information below was corroborated with Warren Wilson of Maplewood, Oregon. Warren, with Al Saxton, bought ownership of the old Fred Borsch Nursery in Maplewood in the mid 1940's and renamed the nursery the Saxton and Wilson Nursery. Warren is a graduate of the Cornell University - a competent and experienced plant taxonomist. (He was the original submitter of the first *Corydalis aquae-gelidae* specimens.) Unfortunately Warren is now suffering from terminal Cancer and presently under Hospice care.

Stanley Anderson (then of Multnomah, now of Tigard and still alive, but I understand very difficult to talk with), my father, Floyd, (who died on November 1989 of Multiple Myeloma), my brother Wes, (presently living in Rochester, New York), Warren Wilson and myself were the people present when the Clackamas River *Corydalis* was first discovered. My brother Wes and I had little to do with the recognition and discovery of the plant-we just happened to be along.

DISCOVERY

It was a day in the middle of summer, sometime in the late 1940's, that the families of Floyd McMullen of Portland, Warren Wilson of Maplewood and Stanley Anderson of Multnomah camped at the junction of the Collowash and Clackamas Rivers in Eastern Clackamas County, Oregon. Floyd McMullen and his sons, Wes and Gene, Warren Wilson and Stanley Anderson went for a walk along an old fisherman's trail that followed the north bank of the Clackamas River. (The main trail at that point went over a high ridge well north of the river, joining it in the vicinity of Austin Hot Springs.) Whether we were fishing or looking for plants that day is unclear. (Probably looking for plants since Floyd, Warren and Stanley were always looking for plants)

Stanley and Dad were knowledgeable amateur taxonomists, very familiar with the native flora. Warren, although a Cornell graduate, was less knowledgeable of the local variations and species of plants and acknowledges that he probably would not

have realized that the *Corydalis* found that day was indeed unique.

Wes and I were almost responsible for this plant not being discovered at that time. Dad and Stanley noted what appeared to be a "Bleeding Heart" or "*Corydalis*" type plant that was growing in a gravel bar across the stream from us (the south bank). It would require a pretty scary crossing to get to the plants. Dad seriously questioned whether Wes and I were strong enough to cross the river at that point but eventually decided kids were less important than plants and guided us across, one at a time, holding on to us and bracing himself with a big stick. I remember it being a difficult crossing.

The plants, which we crossed the river to examine more closely, were quickly identified as some type of *Corydalis* or a plant very similar, but not of a type any of them had ever seen. It was very robust with many flowers and beautiful foliage and had a peculiar and unique habit of growing right out of the rocks and gravel, often where water was flowing. At the time of discovery there were gravel beds in the river stretches between the Collowash and the "Big Bottom" and that was where the *Corydalis* was first found.

Plant specimens and Warren Wilson's extensive notes were furnished to Morton Peck at Willamette University for evaluation and possible classification. (Morton Peck was one of the premier plant taxonomists at that time and the person most readily accessible to Dad, Warren and Stanley.) After evaluation, this *Corydalis* was recognized as a new and different species. Dr. Peck wanted to name this *Corydalis* after Warren Wilson but Warren declined, and the name *Corydalis Aquae-Gelidae* was chosen, a description of it's habitat.

Trips in the early fifties into the "Big Bottom" indicated that this area of flat water and braided channels ~~SUPPORTED~~ the largest group of Clackamas River *Corydalis* known at that time. Subsequent discoveries on the Oak Grove Fork and other tributaries above the Collowash were noted during this period.

Dr. Peck's second (1960) edition of *A Manual of the Higher Plants of Oregon* included this new form of *Corydalis* and he mentions no other areas of known existence outside the Clackamas watershed.

Shortly after the late forties discovery, the road was extended to a point several miles beyond Austin Hot Springs. This road, being built so close to the river and often covering the old meanders, began to slowly wash away the gravel beds and flat areas that the *Corydalis* needed to survive. The great flood of 1964 totally scoured the Clackamas River Canyon between the Collowash and the "Big Bottom", probably due to poor judgement on where the road was placed. After the 1964 flood the groups of *Corydalis* known to the canyon area were totally eliminated. The

flat nature and lack of a road close to the stream spared those plants in the "Big Bottom" area above.

Morton Peck's and Warren Wilson's notes on the first discovery of this *Corydalis* and its eventual recognition must still be on file at Willamette University. In my discussions with Warren he stated that he had his notes somewhere but was unable to find them.

Also, it should be noted that additional finds of this *Corydalis* have occurred in some small Columbia Gorge streams and in a few scattered area of Skamania County, Washington. Dad had heard some years back that some small isolated patches grew around some springs along the Salmon River near Mount Hood. In any event, the other colonies are small and infrequent, none equalling the plants abundance on the Clackamas River and its upper tributaries, especially the Oak Grove Fork.

Respectfully,

Gene McMullen, Portland, Oregon June 1994

LEAFLETS *of* WESTERN BOTANY

CONTENTS

	PAGE
Benitoa, a New Genus of Compositae from California . . . D. D. KECK	25
A New Wyoming Sedge F. J. HERMANN	28
The Subspecies of Phacelia nemoralis Greene L. R. HECKARD	29
Notes on the Flora of Idaho—I WILLIAM H. BAKER	32
Eriogonum Notes V: E. glandulosum, with a New Variety . . . JOHN THOMAS HOWELL	37
X A New Corydalis from Oregon MORTON E. PECK	39

*I hope it is
satisfactory*

rence on the western periphery of the diffused distribution of the species as a whole. While the California stations are some 150 miles from the nearest Nevada station for the species in Lincoln County, it is interesting to note that the two California stations for the variety are themselves about the same distance apart, to the northwest and southeast of Death Valley National Monument. The Kingston Mt. collection was studied by Miss Stokes in 1941 and was distributed with her determination, "Eriogonum trichopes subsp. glandulosum (Nutt.) Stokes aff."

A NEW CORYDALIS FROM OREGON

BY MORTON E. PECK

Willamette University, Salem, Oregon

Early in September, 1947, the writer received from Mr. Warren C. Wilson of Maplewood, Oregon, a specimen of *Corydalis* which he believed represented an undescribed species, or at least one new to the northwest flora, with which he is fairly well acquainted. I was in agreement with his conclusions. The specimens obtained were too scant for an entirely satisfactory study or diagnosis, and Mr. Wilson volunteered to try for more material as opportunity might offer. Finally in August, 1955, he sent me a generous parcel of fresh material from the same locality where that of the previous sending had been obtained. This made possible a fairly full description. When this was near completion, several fine specimens of the same thing, from a different locality, collected by Mr. and Mrs. Earl Marshall and Mrs. Lilla Leach of Portland, were brought me by Mrs. Leach. This material was taken in the prime of flowering, and at once served to establish this as the most beautiful species of the genus west of the Rocky Mountains. The diagnosis under the joint authorship of those most concerned with this is herewith presented:

Corydalis aquae-gelidae M. E. Peck & W. C. Wilson, spec. nov. Planta aquatilis vel subaquatilis dense vel laxe fasciculata e rhizomatibus profundis stolones saepe bifurcatos dimittentibus; caulibus erectis 3-9 dm. altis simplicibus vel 2-4-ramosis, ad basin parce frondosis summe succosis nonnumquam cavis; foliis basilaribus caulibusque inferioribus caulibus subaequilongis, petiolis laminis subaequilongis, laminis pinnate plerumque 4-divisis, petiolulis praeter seriem primam brevissimis, segmentis ultimis 8-15 mm. longis, segmentis ultimis foliorum superiorum multo brevioribus