

NPFLORA

Data Base Expands to 110 Parks

A total of 76 natural area parks in the National Park System now are in the NPFLORA data base and 34 more have been designated for entry in 1985 according to the 1984 NPFLORA Status Report, prepared for the Air and Water Quality Division of NPS by Gary Waggoner, Botanist with the NPS Geographic Information Systems Unit in Denver.

During FY 1984, the NPFLORA data base coverage was enlarged from 45 Air Quality class I units to 76. According to James P. Bennett, Research Branch Ecologist with the Denver Air and Water Quality Division, the parks to be entered in FY 1985 were selected from a master list of all NPS units and their natural features, compiled by the Division.

Out of this list of possibilities, 140 were found to contain natural features and ecosystems of self-sustaining size and thus deserving of inclusion in NPFLORA (for botanical reasons). From the 140, Bennett explained, a roughly even selection of parks was chosen from each NPS Region. Alaska was not included, he said, because of uncertainty about checklists and floras and because of presumed absence of air pollution threats. Waggoner indicated that the presumed presence of air pollution threats was a major factor in selection of the parks that will go into the data base in 1985.

NPFLORA currently has data on 48,995 park occurrences of 12,907 plants. Information on approximately 1,948 new plants was added to the data base. This represents 46 percent of the total vascular flora of North America, Hawaii, and the Caribbean. However, and more importantly, over half (54%) of the native flora is represented in the 76 NPS units (10,514 taxa of a possible 19,530). Ninety percent of the vascular plant families and 71 percent of the genera are represented in these NPS units.

Two Class I units, Crater Lake and Yosemite, are not yet included in NPFLORA. Therefore, the figures presented for Class I areas are approximate and will change once the data for these parks are entered. Tables for the 76 Class I areas include a "completeness estimate," (ranging from well known to poorly known in a five-step rating), total taxa, introduced taxa, and undetermined taxa. Plants endemic to the various designated Regions also are totaled, and the numbers and percentages are given for those that are protected in the 76 NPS units.

The NPFLORA data as of November 1984 for the 19 NPS Biosphere Reserves, show the following total of vascular plant taxa known to occur in these units.:

Big Bend NP, 998; Big Thicket National Preserve, 1,205; Channel Islands NP, 382; Congaree Swamp NM, 327; Denali NP and Preserve, 615; Everglades NP, 942; glacier NP, 1,258; Great Smoky Mountains NP, 1,483; Haleakala NP, 545; Hawaii Volcanoes NP, 570; Isle Royale NP, 690; Roatak National Preserve, no data; Olympic NP, 1,344; Organ Pipe Cactus NM, 517; Redwood NP, 630; Rocky Mountain NP, 972; Sequoia and Kings Canyon NPs, 1,331; Virgin Islands NP, 771; and Yellowstone NP, 1,101. (Some of the lower figures represent a lack of adequate knowledge of a park's flora.)