Inventory of Ute Traditional-Use Plants

THIS STUDY IS focused on the identification of culturally important plants within the BPMD and how they are used by Ute people. The study is informed in part by more than a century of Ute cultural and natural resource studies as well as through interviews with Ute tribal participants. The protocols for collecting ethnographic information have evolved over the past century from a beginning in salvage ethnography that was often exploitative and had little community review or informed consent, to a community-based participatory approach. In our work, we draw upon previously published materials to provide baseline data that our contemporary tribal colleagues could review, correct, and update. The Southern Ute Tribe requested a full review of previously conducted research pertaining to Ute traditional use plants to create a baseline for the tribe's future consultation and educational efforts.

Specifically, this study relies on several key research projects that included ethnobotanical information. For the Ute Indian Tribe, the Ethnography of the Northern Utes (Smith 1974), the summary report of the Ute Ethnobotany Project (Chapoose and others 2012; McBeth and others 2008), and the article "Some Plant Names of the Ute Indians" (Chamberlin 1909) provided the majority of information about Ute plants and names. Three projects that included information about all three Ute tribes were also used, including an ethnographic overview of Chimney Rock National Monument (Hopkins and others 2020), a traditional use study at Great Sand Dunes National Park and Preserve (Kelley and others 2019), and an ethnographic and ethnobotanical survey of the United States Air Force Academy (Kelley and others 2017). The chapter on the Utes written for the Handbook of North American Indians (Callaway and others 1986), and an ethnographic overview of the Utes of west-central Colorado (Burns 2003) also provided significant ethnobotanical

information. Information was also gathered during research at the Ute Indian Museum in Montrose, Colorado, during the current project.

Research specific to the Southern Ute Tribe included a National Park Study on the Old Spanish Trail (Stoffle and others 2008), as well as consultation records and interpretative material generated for the Great Sand Dunes National Park and Preserve (Naranjo 1997; Ruppert 1996). Research specific to the Ute Mountain Ute Tribe includes the recently completed *Ute Mountain Ute Traditional Cultural Property Survey of the Navajo-Gallup Water Supply Project* (Living Heritage Anthropology and others 2019). Several reports discuss how Ute cultural perceptions of the landscape differ from non-Native viewpoints, and how Ute people are uniquely qualified to identify, interpret, and evaluate landscapes and resources that are culturally significant to them (Burns 2003; Callaway and others 1986; Hopkins and others 2020; and McBeth 2019).

Ute orthography has evolved over the last century. In this report, we use the orthography used during the original research when the information was collected. The standardization of Ute orthography was beyond our scope of work. Kroeber (1908), Chamberlin (1909:27-32), and Sapir (1930a, 1930b, and 1931) made early attempts to transcribe the Ute language. James Goss (1967 and 2000) began his study of the Ute language in 1961 and has contributed greatly to Ute orthography over the last half century. Ute terms documented during fieldwork for the present study were provided by and reviewed by tribal research participants for accuracy. Differences in dialect and spelling remain among families and within the three Ute tribes. Presently, the Southern Ute Tribe uses an orthography developed by Thomas Givón (2011, 2013a, and 2013b) as the official orthography of the tribe. Dr. Stacey Oberly, a linguist with the Southern Ute Culture Preservation Department also provided updated translations and Ute terms. When the tribal origin of a Ute term is known, the Ute term is accompanied by a superscript with the following abbreviations: Southern Ute Indian Tribe=(S), Ute Indian Tribe=(N), Ute Mountain Ute Tribe=(M). Ute terms from two bands of the Ute Indian Tribe are abbreviated here as White River Band=(W) and Uncompangre Band=(U).

This chapter discusses Ute traditional-use plants found within the study area. In addition to the information obtained through the literature review, Ute perspectives were documented during fieldwork in the study area designed to elicit Ute information about the cultural significance of plants, including seasonality of use, harvesting practices, and traditional management. A total of 202 plant species were identified through archival research. Forty of these plants were observed during fieldwork (Table 5.1). More traditional-use species are present in the study area but were not observed partly because of seasonal and site-specific

conditions. Of the total plant species; 83 have edible plant parts; 52 have medicinal uses; 16 are used in basketry; 5 are used for fuel (firewood); 19 have ceremonial uses; 17 have utilitarian uses; 7 are used for shelter; 2 are poisonous and avoided; 2 are used for animal feed; 1 as an insect repellent; 2 as a trail marker; 4 are used for hygienic purposes; 7 for weaponry; 1 as a toy; and 46 have unspecified uses. The study team recognizes, however, that these categories capture only one dimension of the cultural significance of these plants. Utes view these plants as indicators of their aboriginal territory, active players in certain oral histories, and as a means of sustaining the life and health of Ute people. This list should also be viewed as incomplete, as Ute protocols for sharing cultural information have previously and continue to influence what information can be shared and documented. Even if a specific plant is not noted here, its very presence in the landscape makes it a part of the Ute cultural and aboriginal landscape and therefore is significant to Ute people.

Table 5.1. Ute Traditional-Use Plants Identified in Archival Research and Field Visits

| Latin Name | Common Name | Ute Name(s) | Traditional Use(s) | Plant Part(s) Used | Elevation Range |
|---------------------------|---|--|--------------------|--------------------|--------------------------------|
| Abronia fragrans | Snowball sand verbena | sa-gwam-six-ta-gwĭv ^(N) | Medicinal | Root; Flower | 400–2000 m (1300–6560 ft) |
| Achillea millefolium* | Yarrow | i-am'-sĭ-ta-gwĭv ^(N) ; quishee quish ^(S) | Medicinal | Leaf | 0-3600 m (0-11800 ft) |
| Achnatherum hymenoides | Indian ricegrass | nuumuvopeeav ^(M) | Edible | Seed | 1066–2286 m (3500–7500 ft) |
| Agastache pallidiflora | Bill Williams Mountain giant hyssop | _ | Edible | Leaf | 2133–3050 m (7000–10000 ft) |
| Agave parryi | Parry's agave | _ | Edible | _ | 1524-2133m (5000-7000 ft) |
| <i>Agoseris</i> spp. | Agoseris; Chicory | añ-'ka-pi-sa-wats ^(N) | Edible | Leaf | 1981–3050 m (6500–10000 ft) |
| Agropyron cristatum* | Crested wheatgrass | _ | Edible | _ | 1524-2743m (5000-9000 ft) |
| Agrostis scabra* | Rough bentgrass | _ | Basketry | _ | 1524-2895 m (5000-9500 ft) |
| Allium spp.* | Garlic | kwee cha see hooh ^(N) ; kwicha-sugu'a ^(S) ; patasi ^(S) | Edible | Bulb; Leaf | 0–3500 m (0–11500 ft) |
| Allium spp. | Wild onion | wisi-sik ^w u ^(w) ; soovweya ^(N) ; seevergravp ^(N) ; cebolla ^(N) ; badasi ^(N) ; kwicha-sugu'a ^(S) ; patasi ^(S) ; saqo-patasi ^(S) ; sigu'a ^(S) | Edible | Bulb; Leaf | 0–3500 m (0–11500 ft) |
| Allium acuminatum | Taper tip onion | küñ-ka ^(N) | Edible | Bulb; Leaf | 91–1493 m (300–4900 ft) |

Table 5.1. (continued)

| Latin Name | Common Name | Ute Name(s) | Traditional Use(s) | Plant Part(s) Used | Elevation Range |
|---|--|---|--------------------------|-----------------------------|---------------------------------|
| Allium bisceptrum | Twin crest onion | küñ-ka ^{⟨ℕ⟩} | Edible | Bulb; Leaf | 11002987 m (36009800 ft) |
| Allium cernuum | Wild onion; Nodding onion | | Edible | Bulb; Leaf | 600–3500 m (1950–11500 ft) |
| Allium geyeri | Geyer's onion | soovweya ^(N) | Edible | Bulb; Leaf | 1524–3050 m (5000–10000 ft) |
| Allium schoenoprasum | Wild chives | kwechusagoot ^(N) ; phutus ^(N) | Edible | Leaf | 0-3500 m (0-11500 ft) |
| Amaranthus powellii | Green amaranth | _ | Edible | Leaf; Seed | 0–2500 m (0–8202 ft) |
| Amaranthus retroflexus | Red root amaranth | _ | Edible | Leaf; Seed | 0-2500 m (0-8202 ft) |
| Amelanchier alnifolia | Serviceberry; Juneberry | jewap ^(S) ; joowump ^(S) ; to-ûmp ^{'(N)} ; toowump ^(S) ; tuw <u>a</u> =pi ^(M) | Edible | Fruit | 1371–2743 m (4500–9000 ft) |
| Amsinckia tessellate | Bristly fiddleneck | tu'-ka-rûmp ^(N) | Unspecified | - | 0–1524 m (0–5000 ft) |
| Antennaria dimorpha | Low pussytoes | tim'-pĭn-tsau-ûv ^(N) | Unspecified | _ | 600–3400 m (1950–11150 ft) |
| Apocynum cannabinum* | Indian hemp | depresen | Utilitarian | _ | 1524–3050 m (5000–10000 ft |
| Arabis holboellii | Holboell's rockcress | qta'-ko-mav ^(N) | Unspecified | _ | 1828–275 m (6000–9000 ft) |
| Arctostaphylos uva-ursi* | Bearberry; Kinnikinnick; Wild tobacco | tahmahup ^(N) | Ceremonial; Medicinal | Leaf | 0–3100 m (0–10170 ft) |
| Arnica mollis* | Soft arnica | | Medicinal | Root | 1000–4000 m (3280–131253 ft) |
| Artemisia spp. | Sage | sahwa-v <u>u</u> ^(s) ; saghwa-p <u>u</u> ^(s) ; sahwovf ^(N) ; sahwavf ^(N) | Medicinal | Leaf; Stem; Flower; Seed | 760–3000 m (2490–9840 ft) |
| Artemisia frigida* | Fringed sage | | Medicinal | Leaf; Stem | 500–3000 m (1640–9842 ft) |
| Artemisia Iudoviciana | Western mugwort | alaster | Medicinal | Leaf; Stem | 760–2590 m (2500–8500 ft) |
| Artemisia tridentata | Big sagebrush | ma-av ^(N) ; ma-ap ^(N) ; sahwovf ^(N) ; meap ^(N) | Medicinal | Leaf; Stem | 1524-2438 m (5000-8000 ft) |
| Asclepias spp.* | Milkweed | sa-na'-ko-mav ^(N) ; teeyahnuhkov ^(N) | Medicinal | _ | _ |
| Ascomycota (Phylum) | Lichen | | Medicinal | _ | _ |
| Asparagus officinalis | Asparagus | - | Edible | Shoot | 0–2500 m (0–8202 ft) |
| Astragalus iodanthus | Humboldt River milkvetch; Buffalo bean | ti'-wǐ-pǐtcûm-av ^(N) | Unspecified | _ | _ |
| Atriplex canescens | Four-wing salt brush | _ | Unspecified | _ | 100–1981 m (300–6500 ft) |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | |

Table 5.1. (continued)

| Latin Name | Common Name | Ute Name(s) | Traditional Use(s) | Plant Part(s) Used | Elevation Range |
|-----------------------------|---|--|--------------------------------|--------------------|--------------------------------|
| Balsamorhiza sagittata | Arrow leaf balsamroot | _ | Edible | _ | 1000–3000 m (300–9842 ft) |
| Beckmannia syzigachne | American slough grass | a-wat'-o-gwĭv ^(N) | Unspecified | _ | 1200–2700 m (4000–9000 ft) |
| Berberis repens | Oregon grape; Barberry | ksĭp-o-a-ats ^(N) | Medicinal; Edible | Root; Fruit | 1524-2591 m (5000-8500 ft) |
| Betula occidentalis | Birch | ?pa-gwai′ûv ^(N) | Unspecified | _ | 1676–2438 m (5500–8000 ft) |
| Bryophyta (Division) | Moss | p <u>a</u> sagho-v <u>u</u> ^(s) | Hygiene | Whole plant | _ |
| Calochortus gunnisonnii | Mariposa lily | - | Edible | Bulb | 900–2700 m (3000–9000 ft) |
| Calochortus nuttallii | Sego lily | si'go ^(N) ; sik ^w u ^(N) ; cikwu ^(W) ; see wus ago ^(N) | Edible | Bulb; Seed; Flower | 1372-2438 m (4500-8000 ft) |
| Carex spp. | Sedge | pi'-gwûts ^(N) ; pa'-gwûts ^(N) | Unspecified | Bulb | |
| Castilleja spp. | Paintbrush | 'aka-sée'a-p <u>u^(S);</u> pia-sée'mi-'nap <u>u^(S);</u> uka-si-ti ^(N) ; ?uka-si=ti ^(U) ; changon-nuhu-nup ^(N) | Utilitarian | _ | _ |
| Castilleja occidentalis* | Western yellow paintbrush | _ | Edible | Flower | - |
| Castilleja integra | Whole leaf paintbrush | _ | Edible | Flower | 1372-3200 m (4500-10500 ft) |
| Castilleja parviflora | Mountain paintbrush | mo'-ten-aĭt ^(N) | Medicinal | _ | _ |
| Castilleja rhexifolia* | Splitleaf Indian paintbrush | _ | Edible | Flower | _ |
| Celtis reticulata* | Netleaf hackberry | _ | Weaponry | Wood | 305–2286 m (1000–7500 ft) |
| Cercocarpus montanus | Mountain mahogany | tu-have ^(M) | Edible; Medicinal; Weaponry | Stem | 1300–2200 m (4500–7000 ft) |
| Chenopodium spp. | Lamb's quarters | _ | Edible | Leaf; Stem | _ |
| Cirsium spp. | Thistle | _ | Edible | Shoot | _ |
| Cladonia spp. | Reindeer lichen | _ | Unspecified | _ | _ |
| Claytonia megarhiza | Spring beauty | noogkachoon ^(N) ; noowhchoon ^(N) ; nooglacachoon ^(N) | Edible | Bulb | _ |
| Cleome serrulata | Rocky Mountain bee plant | _ | Edible; Medicinal | Leaf; Seed | 914-2896 m (3000-9500 ft) |
| Collinsia parviflora | Blue-eyed Mary | mi'-pû ⁿ -ga-shi"-ĕts ^(N) | Medicinal | | 900–2700 m (3000–9000 ft) |
| Comandra umbellata | Pale bastard toadflax | sa-gwa-si-ûn-gûts ^(N) | Medicinal | Root | 152–2591 m (500–8,500 ft) |
| Cornus sericea | Redosier dogwood; Kinnikinnick; Red willow | a-va-tu-tûm-bûtc-ûm-av ^(N) ; kaib'-o-gwĭv ^(N) ; kai'-sĭv ^(N) | Basketry | Stem | 1372–3048 m (4500–10000 ft) |

Table 5.1. (continued)

| Latin Name | Common Name | Ute Name(s) | Traditional Use(s) | Plant Part(s) Used | Elevation Range |
|-----------------------------|---|--|--|--|--------------------------------|
| Crataegus rivularis | River hawthorn | _ | Weaponry | Wood | 1300–2300 m (4265–7545 ft) |
| Cryptantha sericea | Silky cryptantha | yu'-bi-shad-ûmp (U) | Medicinal | Root | |
| Cymopterus Iongipes | Long stalk spring parsley | o-an-tûv ^(N) | Edible | Leaf | _ |
| Cystopteris fragilis | Brittle bladder fern | tǐm-pǐm-ûv ^(N) | Unspecified | | 1524–3658 m (5000–12000 ft) |
| Datura wrightii | Sacred datura | ʻunu-pu-v <u>u</u> ⁽⁵⁾ | Medicinal | _ | 300–1980 m (1000–6500 ft) |
| Daucus carota | Wild carrot | yepuhch ^(ℕ) | Edible | Root | |
| Descurainia pinnata | Western tansy mustard | po-e'-tcĕm-ĕn ^(N) | Medicinal | _ | 0–2438 m (0–8000 ft) |
| Distichlis spicata | Salt grass | _ | Medicinal | Leaf | 0–1829 m (0–6000 ft) |
| Draba nemorosa | Woodland draba | kus-pa-sen-di-ät ^(N) | Unspecified | _ | 0–2700 m (0–8858 ft) |
| Eleocharis palustris | Common spike rush | pa-on-ga-da-pĭn-tĭd ^(N) | Unspecified | _ | 1067–3048 m (3500–10000 ft) |
| Elymus canadensis | Canada wildrye | o-do-rûm-bĭv ^(N) | Edible | Seed | 914-2743 m (3000-9000 ft) |
| Ephedra viridis | Mormon tea; Indian tea | tutu-pʉ v <u>ʉ</u> ^(s) ; nukpii ^(N) | Medicinal; Beverage | Stem | 762-2591 m (2500-8500 ft) |
| Equisetum arvense | Field horsetail; Common horsetail | tu-ko-wûts ^(N) ; to-tsi-wats ^(N) | Unspecified | and the second s | 1372-2743 m (4500-9000 ft) |
| Equisetum hyemale | Scouringrush horsetail | _ | Unspecified | disho | 762-2591 m (2500-8500 ft) |
| Equisetum laevigatum | Smooth scouring rush | ya-a'-ti-nûmp ^(N) | Medicinal; Edible; Utilitarian; Toy | Stem | 914-2438 m (3000-8000 ft) |
| Ericameria nauseosa | Rubber rabbitbrush | saku-pu ^(s) | Ceremonial; Utilitarian | Flower | 610-2440m (2000-8000 ft) |
| Erigeron canus | Hoary fleabane | ?sa-gûm-sĭ-ta-gwĭv ^(N) | Unspecified | _ | 1700–2700 m (5577–8858 ft) |
| Eriogonum spp. | Buckwheat; Cushion buckwheat | k'sûm-sêd-au-ge-ĕts ^(N) | Medicinal | | _ |
| Erysimum asperum | Western wallflower | sa'-go-a''-sĭnt ^(N) | Unspecified | _ | 0–1981 m (0–6500 ft) |
| Fragaria vesca* | Strawberry | twes ^(N) ; tuwisi ^(W) ; tuvwisi ^(S) | Edible | Fruit | 1800–3400 m (6000–11000 ft |
| Fraxinus spp. | Ash | wa'ap u -pu ^(s) | Fuel | Wood | |
| Fritillaria atropurpurea | Spotted fritillary | kai′-rûm-sĭ-ta-gwĭv ^(Ŋ) | Medicinal | Bulb | 1400–2700 m (4500–9000 ft) |
| Fritillaria pudica | Yellow fritillary | pim'-ĭ-kwi-ĕts ^(N) | Edible | Bulb | 0-2100 m (0-6889 ft) |
| Fungi (Kingdom) | Puff ball mushroom | _ | Ceremonial | _ | _ |
| | | | | | |

Table 5.1. (continued)

| Latin Name | Common Name | Ute Name(s) | Traditional Use(s) | Plant Part(s) Used | Elevation Range |
|--------------------------|----------------------------|---|-------------------------------------|-----------------------------|--------------------------------|
| Glaux maritima | Sea milkwort | tsûn′-a-na-di-ĕts ^(N) | Unspecified | _ | _ |
| Grayia spp. | Hop sage | ?sa'-mûv ^(N) | Unspecified | _ | _ |
| Grindelia nuda | Curlytop gumweed | _ | Medicinal | Flower; Root | 200–2900 m (656–9514 ft) |
| Grindelia squarrosa* | Curlycup gumweed | ku-ats-ûm-sĭ-ta-gwĭv ^(N) | Medicinal | Flower; Root | 200–2900 m (656–9514 ft) |
| Gutierrezia spp. | Snakeweed | shpûmp ^(N) ; gudereria ^(N) | Unspecified | _ | |
| Hedysarum boreale | Utah sweet vetch | kai-va-ma-mû-tca-kwûv ^(N) ; mo'-těm-be-ĭtch ^(N) | Medicinal | Root | 1800–2900 m (6000–9500 ft) |
| Helianthus spp. | Sunflower | ahkoop ⁽ⁿ⁾ ; ?akʷ <u>u</u> =pɨ ⁽ⁿ⁾ ; ?ukwu=pɨ ^(w) ; k ú -p <u>u</u> ^(s) | Edible | Seed; Flower; Leaf; Root | _ |
| Hierochloe odorata | Sweetgrass | _ | Ceremonial | Leaf | _ |
| lpomopsis aggregata | Scarlet gilia | _ | Edible; Utilitarian | Flower; Whole plant | 1524-2591 m (5000-8500 ft) |
| Ipomopsis Iongiflora | Flaxflowered gilia | _ | Edible | Flower | 457–2134 m (1500–7000 ft) |
| Iva axillaris | Poverty weed | tam-ĕs'-ta-gwĭv ^(N) ; ta-ma-sĭ-ta-gwĭv ^(N) | Medicinal | _ | 10-2500 m (32-8202 ft) |
| Juncus balticus | Baltic rush | pau-wûv ^(N) | Ceremonial | Stem | 1066–2895 m (3500–9500 ft) |
| Juncus ensifolius | Swordleaf rush | _ | Basketry | Stem | 453–3048 m (1500–10000 ft) |
| Juncus parryi* | Parry rush | _ | Basketry | Stem | 1500–4000 m (4921–13123 ft) |
| Juniperus spp. | Juniper; Cedar | pawa-p <u>u^(S);</u> wahuhp ^(N) | Edible; Ceremonial; Medicinal | Needle; Cone | _ |
| Juniperus communis | Common juniper | wahup ^(M) | Edible; Weaponry | Cone; Wood | 0-3400 m (0-11200 ft) |
| Juniperus deppeana | Alligator juniper | bawahup ^(N) | Unspecified | _ | 1372-3048 m (4500-10000 ft) |
| Juniperus monosperma | One-seed juniper | | Ceremonial | Leaf | 914-2134 m (3000- 7000 ft) |
| luniperus osteosperma | Utah juniper | wahup ^(N) | Edible | Cone | 800-2600 m (2600-9000 ft) |
| Juniperus scopulorum | Rocky Mountain juniper | wahup ^(s,n) ; po wap ^(s,m) | Ceremonial; Edible; Weaponry | Needle; Cone; Wood | 1067–2743 m (3500–9000 ft) |
| Lathyrus ornatus | Bonneville pea | sa-gwa'-sa-ĭnt ^(N) | Unspecified | _ | _ |
| Lepidium spp. | Pepperweed; Peppergrass | sau'-ga-mi-ants ^(N) ; wa'-to-ma-sĭv ^(N) | Unspecified | _ | _ |
| Lewisia pygmaea | Alpine bitterroot | _ | Edible | Root | 2300–4200 m (7545–13780 ft) |
| Lewisia redivia | Bitterroot | n u guni ^(s) | Ceremonial; Medicinal; Edible | Root | _ |
| | | | | | |

Table 5.1. (continued)

| Latin Name | Common Name | Ute Name(s) | Traditional Use(s) | Plant Part(s) Used | Elevation Range |
|--|--|---|---|--------------------|--------------------------------|
| Leymus salinus | Saline wildrye | o-wiu ^(N) | Unspecified | | 0-3050 m (0-10000 ft) |
| Ligusticum porteri* | Oshá; Bear root; Porter's lovage | kwiya-gha-tu tuka-p <u>i</u> (s); kwiyaghatu tuna-pu (s); gweahgahtichganap (M) | Ceremonial; Medicinal | Root | 1300–3500 m (4300–11500 ft) |
| Lithospermum ruderale | Western stone seed | tsût-kûp ^(N) | Medicinal | Root | _ |
| Lomatium dissectum var. multifidum | Biscuitroot; Carrot leaf | k ^w iu ^(N) | Medicinal; Edible | Root | 150–3000 m (492–9842 ft) |
| Lycopus americanus | American horehound | | Medicinal | _ | 1524-2286 m (5000-7500 ft) |
| Maianthemum racemosum | Feathery false lily of the valley | yo-gwo′-ta-ma-nûmp ^(∪) | Unspecified | - | 1981–3048 m (6500–10000 ft) |
| Matricaria discoidea | Disc mayweed; May apple | (ma)-mo-a-na-nûmp ^(N) | Medicinal | | 0-2700 m (0-8858 ft) |
| Mentha arvensis | Wild mint | damount-up ^(N) ; kouerau-nap ^(N) | Ceremonial; Edible; Beverage | Leaf; Stem | 1524–2896 m (5000–9500 ft) |
| Monarda fistulosa | Mintleaf beebalm; Indian perfume | _ | Insect repellent; Medicinal; Hygiene | Leaf | 1500–2600 m (5000–8500 ft) |
| Nicotiana attenuata | Coyote tobacco | sapatu=ti ^(N) | Medicinal; Ceremonial | Leaf | 305-2134 m (1000-7000 ft) |
| Nuphar lutea | Yellow pond lily | enus | Edible | Leaf; Seed | 2000–2250 m (600–7500 ft) |
| Oenothera spp. | Evening primrose | _ | Unspecified | _ | _ |
| Opuntia spp. | Prickly pear | mana=pi ^(N,U) ; manivf ^(S) | Utilitarian; Edible | Fruit; Leaf | |
| Opuntia polyacantha | Plains prickly pear | maanife ^(N) ; manivf ^(S) | Edible; Medicinal | Fruit; Pad; Flower | 609–2438 m (2000–8000 ft) |
| Orogenia linearifolia | Great Basin Indian potato | n <u>uu</u> -puc <u>u</u> =ti ^(w) ; pĭn-'ka-pai-äts ^(N) | Edible | Bulb | _ |
| Pascopyrum smithii* | Western wheatgrass | _ | Animal feed | Leaf; Seed | 914–2438 m (3000–8000 ft) |
| Paxistima myrsinites | Oregon box leaf | te-ĕ-kav ^(N) | Unspecified | | 1372-2743 m (4500-9000 ft) |
| Penstemon glaber | Western smooth beardtongue | mû-tcĕm-bi-a ^(N) | Unspecified | | |
| Perideridia gairdneri | Yampa | yam-pah ^(N) ; yaa=pi ^(N,W) | Edible | Root | 0–3000 m (0–9842 ft) |
| Phacelia spp. | Phacelia | ?(ma)-mû′-tĕm-bi-a ^(ℕ) | Unspecified | _ | |
| Phleum pratense* | Common Timothy | _ | Animal feed | Leaf, Seed | 1219-2134 m (4000-9000 ft) |
| Phlox gracilis; Microsteris gracilis | Slender phlox | yo-gûm-sĭ-ta-gwĭv ^(U) | Medicinal | Whole plant | 300–2400 m (1000–8000 ft) |
| Phlox longifolia | Longleaf phlox | mo-mu-'kwi-ěts ^(N) | Unspecified | | 980–2070 m (3200–6800 ft) |

| Latin Name | Common Name | Ute Name(s) | Traditional Use(s) | Plant Part(s) Used | Elevation Range |
|------------------------------------|---|--|--|----------------------------|--------------------------------|
| Phragmites australis | Common reed | | Basketry | Stem | 0–1829 m (0–6000 ft) |
| Picea engelmannii* | Engelmann spruce | _ | Trail Marker; Shelter | Wood | 2438-3505 m (8000-11500 ft) |
| Picea pungens | Colorado blue spruce | yiyuup ^(M) | Trail Marker; Shelter | Wood | 1800–3000 m (5905–9842 ft) |
| Pinus aristata | Bristle-cone pine | _ | Beverage | Needle | 1700–3400 m (5577–11154 ft) |
| Pinus contorta | Lodgepole pine | ah-gwoop ^(N) | Shelter | Wood | |
| Pinus edulis | Piñon pine | wa'a-p <u>u</u> (s); tu-gwoop(M); noodtoohuuhch(N); noodtoohvuhch(N); na?a-t i pa=ci(M); nutu-t i pa=ci(W) | Edible; Utilitarian; Basketry; Fuel | Wood; Seed; Sap; Needle | 1500–2700 m (4921–8858 ft) |
| Pinus flexilis | Limber pine | ah-gwoop ^(N) | Shelter | Wood | 1000–3000 m (3280–9842 ft) |
| Pinus ponderosa* | Ponderosa pine | ʻagho-p <u>u^(S);</u> uu-vweep ^(N) | Ceremonial; Edible; Medicinal; Utilitarian | Wood; Sap; Needle | 1524–2743 m (5000–9000 ft) |
| Poliomintha incana | Purple sage; smoke sage; frosted mint | ʻaqho-tama-na-p <u>u</u> ^(s) ; quata manah ^(M) | Medicinal | Whole plant | _ |
| Polypogon monspeliensis | Annual rabbit's foot grass | shpump ^(N) | Unspecified | _ | 152-2438 m (500-5000 ft) |
| Populus spp. | Cottonwood | s uu vu-p <u>u^(s);</u> páa- s uu vu-p <u>u</u> ^(s) ; sho-av ^(N) | Ceremonial; Fuel; Utilitarian; Edible | Wood; Seed; Bark | 1524-2286 m (5000-75000 ft) |
| Populus angustifolia* | Narrowleaf cottonwood | _ | Unspecified | _ | 1500–2200m (5000–7000 ft) |
| Populus fremontii | Fremont's cottonwood | _ | Unspecified | _ | 700–1900m (2500–6100 ft) |
| Populus tremuloides* | Aspen | s uu vu-p <u>u</u> ^(s) | Edible; Medicinal; Shelter; Fuel; Ceremonial | Wood; Sap | 0–3048 m (0–10000 ft) |
| Potentilla anserina | Silverweed cinquefoil | qte'-äñ-gĭv ^(N) | Unspecified | _ | 1100-2700 m (3500-9000 ft) |
| Potentilla concinna* | Elegant cinquefoil | _ | Unspecified | _ | |
| Potentilla rubricaulis* | Rocky Mountain cinquefoil | _ | Unspecified | _ | |
| Prunus virginiana* | Chokecherry | tée'na-p <u>i</u> ^(s) ; durn-up ^(s) ; turnup ^(N) ; titatɨn <u>a</u> =pɨ ^(W) | Edible; Weaponry | Fruit; Stem | (1372–2438 m (4500–8000 ft) |
| Pseudo- cymopterus montanus* | Alpine false spring parsley | - | Edible | Root | 1676–3658 m (5500–12000 ft) |
| Pseudotsuga menziesii * | Douglas fir | sa'ma-ʻagho-p <u>u</u> ^(s) ; sa'ma-y u vu-p <u>u</u> ^(s) | Shelter | Wood | 1524–3048 m (5000–10000 ft) |
| Pteridium aquilinum | Western bracken fern | kai-ban-kĭm-bĭs ^(N) | Edible | Leaf; Shoot | 1067–2896 m (3500–9500 ft) |

Table 5.1. (continued)

| Latin Name | Common Name | Ute Name(s) | Traditional Use(s) | Plant Part(s) Used | Elevation Range |
|--------------------------|--|--|---|--------------------|--------------------------------|
| Purshia spp. | Cliffrose | pu-i'-tcûm-av ^(N) | Unspecified | _ | _ |
| Quercus gambelii* | Gambel oak | kwiya-vʉ ^(s) ; quiuve ^(s) ; quiau ^(M) ; kwi'-ûv ^(s) | Ceremonial; Edible; Shelter; Weaponry; Utilitarian | Seed; Wood; Leaf | 1219-3048 m (4000-10000 ft) |
| Ranunculus aquatilis | White water crowfoot | pai′-a-pu-ĕts ^(ℕ) | Unspecified | and the second | 1372–2743 m (4500–9000 ft) |
| Ranunculus cymbalaria | Alkali buttercup | pau-ûs-a-nau-ga-ant ^(N) | Unspecified | - | 1524-2438 m (5000-9000 ft) |
| Rhus trilobata* | Three-leaf sumac; Skunkbush | ′isi-vʉ ^(s) ; eesh ^(s,N) ; mo-tam-bi-äts ^(N) ; w <u>i</u> si ^(N) | Edible; Utilitarian; Basketry | Fruit; Stem; Root | 762–2286 m (2500–7500 ft) |
| Ribes spp. | Currant; Gooseberry | sí-voghoy-p <u>i</u> ^(s) ; poghoy-p <u>i</u> ^(s) ; k ^w atɨna=pɨ ^(w) | Edible | Fruit | |
| Ribes aureum | Golden currant | po-gomp'-ĭv ^(N) | Edible | Fruit | 1200–2100 m (4000–7000 ft) |
| Ribes cereum | Western red currant; Wax currant | poo gweep ^(s) | Edible | Fruit | 91–3962 m (300–13000 ft) |
| Ribes inerme | White stem gooseberry | sapat <u>uu</u> =pɨ ^(w) | Edible | Fruit | 1219-2134 m (4000-7000 ft) |
| Ribes leptanthum | Trumpet gooseberry | _ | Edible | Fruit | 1676-3048 m (5500-10000 ft) |
| Rosa spp. | Wild rose | gehrump ^(N) ; añ-ga-ko-rĭmp ^(N) | Edible | Fruit | |
| Rosa sayi | Prickly rose | | Unspecified | | _ |
| Rosa woodsii* | Wood's rose | añ-ga-si-ûñ-gĭv ^(N) | Edible; Medicinal | Fruit | 1676–2743 m (5500 9000 ft) |
| Rubus ideaus* | Raspberry | poghoy-pʉ-v <u>ʉ</u> ^(s) ; naka=wat <u>u</u> =pɨ ^(w) | Edible | Fruit | 1850–3500 m (6000–11500 ft) |
| Rubus parviflorus* | Thimbleberry | | Edible | Fruit | 2150-3250 m (7000-10800 ft) |
| Rumex crispus | Culrey dock | 600-v | Edible, Medicinal | | |
| Rumex salicifolius* | Willow dock | _ | Medicinal | - | 300–2700 m (1000–9000 ft) |
| Salix spp. | Willow | aguu kannu ^(s) ; ka-nivh ^(s) ; auka ka-nivh ^(s) ; kana-v <u>u</u> ^(s) | Ceremonial; Medicinal; Basketry | Stem; Cambium | - |
| Salix amygdaloides | Peachleaf willow | k'sa'nav; k'sa-ka-nav | Basketry | Stem | 1524–1981 m (5000–6500 ft) |
| Salix eriocephala | Missouri River willow | _ | Basketry | Stem | 0–1200 m (0–3937 ft) |
| Salix exigua* | Sandbar; Coyote willow | ka-nav ^{r (S)} | Basketry | Stem | 350-2800 m (100-9200 ft) |
| Salix lasiandra | Pacific willow | appea. | Basketry | Stem | 1200–2700 m (3700–8300 ft) |
| Salix lucida | Shining willow | k'sa'nav; k'sa-ka-nav | Basketry | Stem | 0–600 m (0–1968 ft) |

Table 5.1. (continued)

| Latin Name | Common Name | Ute Name(s) | Traditional Use(s) | Plant Part(s) Used | Elevation Range |
|-----------------------------------|---------------------------------|---|---|--------------------|--------------------------------|
| Salix scouleriana | Scouler's willow | ta-ma-nûmp-ĭn-av ^(N) ; ta-ma-nûmp-in-ka-av ^(N) | Basketry | Stem | 2100–3300 m (6900–10700 ft) |
| Sambucus microbotrys | Elderberry | _ | Edible | Fruit | 1829–3048 m (6000–10000 ft) |
| Sambucus racemosa* | Red elderberry | _ | Edible | Fruit | 1829-3048 m (6000-10000 ft) |
| Schoenoplectus tabernaemontani | Soft stem bulrush | t'su-saip ^(N) | Edible | Shoot | 0–2438 m (0–8000 ft) |
| Senecio spp. | Groundsel | ko-ats-ĕm-sĭ-ta-gwĭv ^(N) | Medicinal | _ | _ |
| Shepherdia argentea | Buffaloberry | tuwa-p <u>u</u> ^(s) ; ahkup ^(N) ; agup ^(N) ; anga-si-un-giv ^(N) ; añ-gût-a-gwĭv ^(N) ; nika=pi ^(W) | Edible; Medicinal | Fruit | _ |
| Shepherdia canadensis | Russet buffaloberry | ta-ma-nûmp ^(N) | Edible | Fruit | 2134-2743 m (7000-10000 ft) |
| Solanum jamesii | Wild potato; Mountain potato | _ | Edible | Tuber | 1676-2591 m (5500-8500 ft) |
| Solidago simplex* | Mt. Albert goldenrod | _ | Medicinal | _ | 1100-2900 m (3500-9500 ft) |
| Sphaeralcea spp. | Globe mallow | _ | Edible | _ | |
| Spiranthes diluvialis | Ute ladies tresses | _ | Medicinal ' | _ | 1300–1800 m (4265–5905 ft) |
| Streptanthus cordatus | Heartleaf twist flower | o-nûn-ga-ats ^(N) | Unspecified | _ | 610-2438 m (2000-8000 ft) |
| Symphoricarpos spp. * | Snowberry | _ | Basketry | Stem | 1100–3700 m (3500–12000 ft) |
| Taraxacum officinale* | Common dandelion | (mo)-mûn'-ti-ad-qsûp ^(N) | Edible | Leaf; Flower | 762–2743 m (2500–9000 ft) |
| Tellima spp. | Tellima | añ-gai-ya-ga-ti-nûmp ^(ℕ) | Unspecified | _ | _ |
| Toxicodendron rydbergii | Poison ivy | che dap ^(M) ; chi-nip ^(M) | Poisonous | _ | 0-2591 m (0-8500 ft) |
| Trifolium spp. | Clover | pu-i'-tcûm-av ^(w) | Unspecified | _ | • |
| Trifolium pratense | Red clover | ?sa-gwa-ĭn-di-ûp ^(N) ; mo'-pi-änts ^(N) ; mû'-pi-äints ^(N) | Unspecified | _ | 1200–2700 m (4000–9000 ft) |
| Trifolium repens | White clover | | Unspecified | _ | 1067-2286 m (3500-7500 ft) |
| Triglochin maritima | Seaside arrowgrass | pa'-sau-wa-dĭnt ^(N) | Unspecified | _ | 1372-2591 m (4500-8500 ft) |
| Typha angustifolia | Narrow-leaf cattail | _ | Ceremonial; Edible; Utilitarian | Shoot; seed; leaf | 0–1900 m (0–6233 ft) |
| Typha latifolia | Broad-leaf cattail | _ | Ceremonial; Edible; Utilitarian; Basketry | Shoot; Seed; Leaf | 1219–2591 m (4000–8500 ft) |
| Ulmus pumila* | Siberian elm | _ | Fuel | Wood | 0-2286 m (0-7500 ft) |

continued

| K | Chapter | Fiv |
|---|---------|-----|
|---|---------|-----|

| | | | 4.5 |
|------|---------|----------|------|
| Tabl | le 5.1. | (continu | Jed) |

| erry; Dwarf leberry; berry mon mullein | tuwa-pi ^(S) ; toowump ^(N) ; patu=pi ^(N) teeyahumkuv ^(S, N) | Edible Medicinal | Fruit Leaf | 0–4500 m (0–14763 ft) |
|---|--|---------------------------------|---|--|
| | | Medicinal | Leaf | |
| with's violet | las bassay to access (N) | | | (5000–7000 ft) |
| | ka-bam-sĭ-ta-gwĭv ^(N) | Medicinal | | 900-2700 m (2952-8858 ft) |
| weed yucca | wisi ^(M) | Edible; Utilitarian | Fruit | _ |
| ana yucca | wisi ^(M) ; w <u>i</u> si ^(N) ; wisiwĭv ^(M) ; wíisi-v <u>u</u> ^(S) | Edible; Utilitarian | Fruit; Leaves | 914-2438 m (3000-8000 ft) |
| weed yucca | _ | Edible; Hygiene; Utilitarian | Root; Fruit; Leaves | 1067–2591 m (3500–8500 ft) |
| nish bayonet | w <u>i</u> si ^(N) | Hygiene; Utilitarian | Root; Leaves | 1000–2500 m (3280–8202 ft) |
| all's death | ta-bä'-si-gwĭv ^(N) | Poisonous | Bulb | 500–1200 m (1640–3937 ft) |
| | | ıll's death ta-bä'-si-gwĭv™ | ıll's death ta-bä'-si-gwĭv ^(N) Poisonous | ıll's death ta-bä'-si-gwĭv ^(N) Poisonous Bulb |

Denotes plants species was observed during fieldwork . Elevation ranges derived from SEINet 2021; Springer and others 2009.

ETHNOGRAPHIC SUMMARIES OF PLANT RESOURCES IN THE BPMD AREA

Plants are important in Ute subsistence and ceremony, spirituality, and education. Traditional-use plants are considered sacred because they provide a link to traditional Ute values, knowledge, and history (Perlman 1998:69). Traditional-use plants serve a range of functions including food, medicine, ceremonies, household maintenance, hygiene, construction, shelter, entertainment, and education. Traditional knowledge about plants has been preserved primarily through the continued interaction with the environment and maintenance of traditional cultural practices. The following section describes ethnographic information for plants identified during this study. For some plants, the available ethnographic information is limited to a Ute name; however, even this is significant because names represent a legacy of use, knowledge, and understanding.

The ethnographic information presented in this chapter was obtained or reviewed during interviews and fieldwork with Ute tribal research participants (Figure 5.1; Figure 5.2; Figure 5.3). A plant biologist, William Widener, assisted with fieldwork to ensure accurate identification of plant species. Plants are listed in alphabetical order according to their scientific name and are summarized in Table 5.1. Scientific terminology rather than Ute names were used to order the discussion so that the EPA can more easily use these data for continued remedial investigation of the BPMD. Common names and Ute names are also provided.

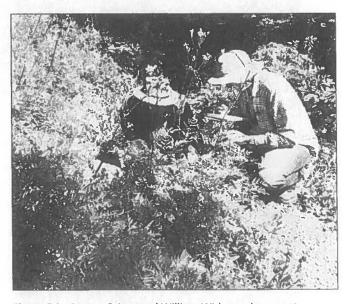


Figure 5.1. Garrett Briggs and William Widener document plants in the BPMD study area. Photograph by Maren Hopkins, August 20, 2019.

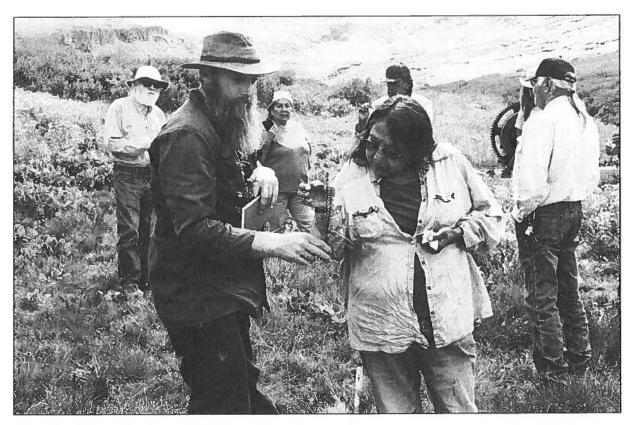


Figure 5.2. William Widener and Cassandra Atencio discuss plants in the project area. Photograph by Maren Hopkins, August 20, 2019.



Figure 5.3. William Widener discusses plants with Terry Knight. Photograph by Maren Hopkins, August 20, 2019.