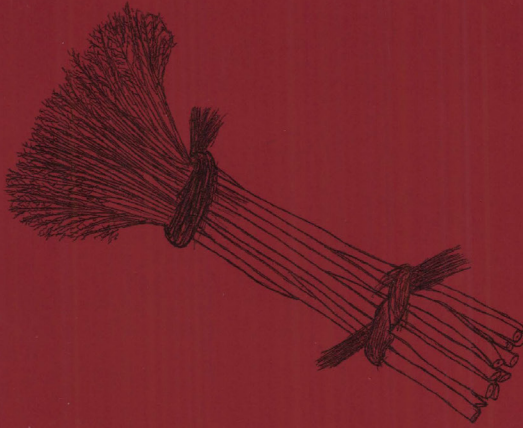


Gilbert Livingston Wilson

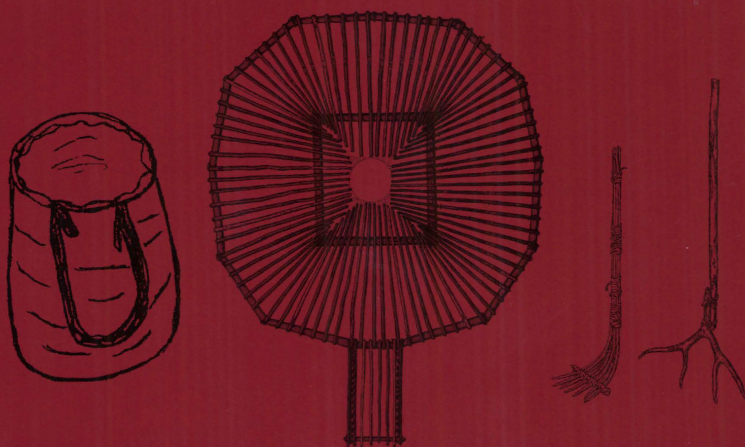
Edited and annotated by Michael Scullin



Uses of Plants *by*
the Hidatsas *of the*
Northern Plains

"Every aspect of life is part of this classic ethnology, from acquisition of food to spirituality to the raising of the four sacred wooden pillars of a new Earth Lodge. . . . Editor Michael Scullin does a wonderful job of weaving the many living parts of Buffalobird-woman's story. . . . The book's precision—many specific uses for many plants—is a pleasure to read. One gets a sense of a people who rose to the challenge of using what nature provided them to wrest a living from a demanding environment."

—BRUCE JOHANSEN, Jacob J. Isaacson Professor of Communication and Native American Studies at the University of Nebraska at Omaha and author of *The Native Peoples of North America: A History*



CONTENTS

List of Illustrations	xi
Preface	xv
Acknowledgments	xix
Introduction	xxi
Editor's Note	xxxvii

Abbreviations: BBW=Buffalobird-woman;
PW=Poor Wolf; GB=Goodbird;
SW=Sioux Woman; GLW=Gilbert Wilson;
WC=Wolf Chief; MS=Michael Scullin

1. Plants That Are Eaten

Domesticated plants (MS)	3
Sunflowers (BBW)	17
Corn-smut (BBW)	20
Prairie turnips (BBW)	22
Jerusalem artichokes (BBW)	31
Hogpeanut (BBW, WC, GB)	36
Chokecherries (BBW)	43
Buffaloberries (BBW)	50
Gooseberries (BBW)	52
Black currants (BBW)	54
Wild grapes (BBW)	56

2. Plants That Can Be Eaten

Hawthorns (BBW)	59
Wild white onions (BBW)	61
Ball cactus (BBW, WC)	63

3. Plants That Are Sweet

Juneberries (BBW)	71
White juneberries (BBW)	78
Wild plums (BBW)	79
Strawberries (BBW)	83
Roses (BBW)	85
Red raspberries (BBW, SW, GB)	91
Biscuitroot (BBW)	93
Nannyberries (BBW)	97
Purple prairie clover (BBW)	99

4. Plants That Are Good to Chew

Sticky gum (BBW)	103
Pine pitch (BBW)	105

5. Plants That Smell Good

Purple meadow-rue (BBW)	109
Blue giant hyssop (BBW)	111
Sweetgrass (BBW)	112
Wild bergamot (BBW)	117
Pine needles (BBW)	119
Perfumes used in beds (BBW)	121
Beaver musk (BBW)	123

6. Plants That Have Medicinal Uses

Big medicine (BBW)	127
White and red baneberry (BBW)	128
Gumweed (WC)	130
Purple coneflower (WC)	132
“Medicine in the woods” (BBW)	134
Poison ivy (BBW)	135
Unknown grass (BBW, GB)	137
Peppermint (BBW)	138

7. Plants Used for Fiber

Dogbane (WC)	141
Upright sedge (BBW)	155
Grasswork ornaments on leggings	159

8. Plants Used for Smoking

Tobacco 9a (BBW)	163
Tobacco 9b (WC)	172
Red-osier dogwood (BBW)	187
Bearberry (BBW)	189
Bearberry or kinnikinnick (WC)	191

9. Plants Used for Dye and Coloring

Yellow owl's-clover (BBW)	197
Water smartweed (BBW)	198
Dye plants—unidentified (BBW)	199

10. Plants Used for Toys

<i>Umakixeke</i> , or game of throwing sticks (BBW, GB)	203
Popguns (BBW)	204
A toy horse	205
Reed whistle (GB)	206

11. Plants Used for Utilitarian Purposes

Cordgrass (BBW)	211
Buckbrush (BBW)	213
Cattails (BBW)	219
Boxelder (BBW)	222
Buffalograss (BBW)	226
Big bluestem (WC)	228
Common rush (BBW)	231
Scouringrush horsetail (WC)	237
Puffball (BBW)	239

Snakewood (BBW, WC)	241
Goldenrod (BBW)	244
Prairie grasses as fodder (WC)	246

12. Plants Used for Rituals or with Ritual Significance

The three kinds of sage (WC)	251
Pasture sage 1 (BBW, GB)	256
Pasture sage 2 (BBW, WC)	258
Common sagewort (BBW, WC, GB)	261
Black sage (BBW, WC)	262
Fringed sage (PW)	268
Juniper (Cedar) (BBW, WC, GB)	269
Creeping juniper (BBW, GB)	270
Prairie sandreed (WC)	271
Bittersweet (WC)	275

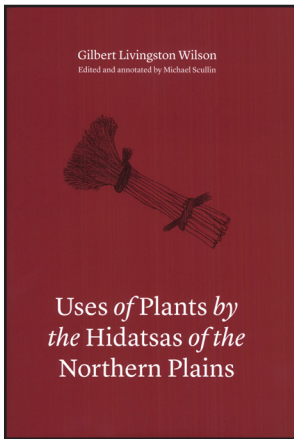
13. Sources of Wood

Wood as a resource (MS)	279
Cottonwood (WC)	284
Ash (BBW)	289
Peachleaf willow (BBW)	291
Sandbar willow (BBW, WC, GB)	294
Heart-leaved willow (BBW)	297
Quaking aspen (BBW)	299
American elm (BBW)	300
Water birch (BBW)	301
Boxelder (BBW)	302

14. Uses of Wood

Gathering firewood (WC)	305
Digging-sticks (BBW, WC)	311
Mortar and pestle (BBW)	314
Making a bullboat frame (BBW)	316
Making a wooden bowl (WC)	320

Rakes (and the bison scapula hoe) (BBW, WC)	325
Paddle for working clay pots (cottonwood bark) (GLW)	329
15. Arrows	
Significance and utility (MS)	333
Making arrows (WC)	335
Types of arrows (WC)	344
Bows (WC)	347
Arrows for boys (BBW, GB)	350
Mock battle with grass arrows (WC)	354
16. Earthlodges	
Building an earthlodge (BBW)	359
On Earthlodges (The observations of Hairy Coat and Not A Woman)	370
Winter lodges and twin lodges (BBW)	374
The peaked or tipi-shaped hunting lodge (BBW)	378
The use of sod as an earthlodge covering	382
Dismantling an old earthlodge (BBW)	384
Like-a-Fishhook Village and environs (WC)	389
17. Miscellaneous Material	
Basket making (BBW)	395
Native drinks of the Hidatsas (BBW)	403
How our meals were served (GB)	406
Nettles (BBW)	409
Forest fire (GLW)	411
Conclusion	413
Appendix: Frederick N. Wilson's Comments on "The Hidatsa Earthlodge"	419
Bibliography	427



Use of Plants by the Hidatsas of the Northern Plains

Gilbert Livingston Wilson. Edited and Annotated by Michael Scullin. University of Nebraska Press, 2014. xxxix+432 pp., 1 map, 71 figures, 1 appendix, references. \$65 (Hardcover).

Reviewed by Kimberly Schaefer, Illinois State Archaeological Survey, University of Illinois, Urbana–Champaign.

In the early 1900s, Gilbert L. Wilson, accompanied occasionally by his brother Frederick, conducted landmark ethnographic studies of the Hidatsa of North Dakota. Wilson spent 12 years working with the Hidatsa—working most closely with Buffalobird-woman (Maxi'diwiac) and her family. Buffalobird-woman's memories of traditional Hidatsa horticultural techniques used by her people in “the old days” formed the basis of Wilson's dissertation, *Agriculture of the Hidatsa Indians*, which is still in print under the title *Buffalobird-woman's Garden*. Ethnographic accounts of Native American horticulture and subsistence techniques before the arrival of Europeans are extremely rare. Therefore, even though Hidatsa subsistence practices were rapidly changing during Buffalobird-woman's lifetime, as their social circumstances and technology were increasingly influenced by Euro-Americans, Wilson's dissertation is still very informative of older traditions and extremely useful to people interested in Native American subsistence techniques.

In 1916, ten years after he'd begun working with the Hidatsa, Wilson agreed to conduct an ethnobotanical project in collaboration with Professor Josephine Tilden of the Botany Department at the University of Minnesota. For this project, Wilson collected samples of plants used by the Hidatsa and interviewed Buffalobird-woman and her family about their uses. Unfortunately, although Wilson collected the samples and made copious notes, the project was never completed. The botanical samples were never identified and were eventually lost. Wilson's notes were never prepared for publication and were left unused in his notebooks and the archives of the American Museum of Natural History. In *Use of Plants by the Hidatsas*, Michael Scullin has compiled and edited many of Wilson's notes from this project, making them widely available for the first time.

Use of Plants by the Hidatsa understandably overlaps a little with some of the material covered in *Buffalobird-woman's Garden*. However, for the most part, the two books have different focuses. While *Buffalobird-woman's Garden* is largely focused on Hidatsa farming techniques, *Use of Plants* is much more concerned with wild plants used by the Hidatsa. Thus, this book is an invaluable complement to *Buffalobird-woman's Garden* and together the two present a much more complete view of the Hidatsa's relationship with plants.

Use of Plants is divided up into sections about specific plants or ways of using plants, and is organized into chapters based on their uses as described by Buffalobird-woman and her family. These categories include edible or sweet plants, perfumes, medicines, fibers, plants for smoking, and plants collected for a variety of technological uses. Unfortunately, there is no explanation for how these categories were derived or recognized as being distinct from

one another by the Hidatsa. This may be something Wilson never inquired about, but from a modern perspective the categories are not all immediately clear. The distinction between “Plants that are Eaten” and “Plants that Can be Eaten” may reflect the Hidatsa’s preferences in food sources. The distinction between “Plants that are Eaten” and “Plants that are Sweet,” however, seems much more arbitrary, especially since some of the former are noted as being primarily consumed for their sweetness and all of the sweet plants were consumed. Additionally, many plants had multiple uses but they are largely classified by their most common use.

Each section begins with the plant’s common name and use, and its Hidatsa name, local English name, and botanical name, if known. Some sections have introductory remarks on the plants, their habits, or their uses by Scullin, followed by excerpts from Wilson’s notes. There are actually multiple authorial voices in every section, therefore. Most of the primary information came from Buffalobird-woman or her brother Wolf Chief, who was Wilson’s primary male Hidatsa informant. Their words were translated by Buffalobird-woman’s son Edward Goodbird, who also contributed information of his own on certain topics. The translated information was then written down by Wilson, who occasionally added his own remarks and interpretations. Finally, Scullin edited Wilson’s notes, added some of his own parenthetical observations, and prepared the introductory sections. So it is occasionally difficult to tell who provided specific pieces of information, although the editor has thankfully attempted to include initials and citations to attribute contributions to the proper person.

Scullin has experimentally grown Hidatsa plants in his garden in North Dakota for about 30 years and many of his comments on the plants discussed reflect his experiences there. He also occasionally corrects some botanical mistakes or assumptions made by either Buffalobird-woman or Wilson. For the most part, I found Scullin’s additions very useful for clarifying aspects of the plants used. His experiences also are helpful in illuminating some of the details of Hidatsa horticulture that Buffalobird-woman did not talk about [and which Wilson, not being a gardener, did not think to ask about]. However, in a few cases Scullin’s experiences run counter to Buffalobird-woman’s, and we are left to wonder who is correct.

For each plant discussed, generally, Buffalobird-woman gave an account of what she knew of the plant: what it looked like, where and how it grew, how it was gathered or produced, and how the Hidatsa used it. Her accounts and those of Wolf Chief vary widely from plant to plant. The plants most important to them are described in detail, while others are only given cursory treatment. Buffalobird-woman gave recipes for many plants used as food and detailed descriptions of how some plants were used for technological purposes like weaving baskets or making tools. Wolf Chief’s accounts of plants tended to be more anecdotal. However, having both Buffalobird-woman and Wolf Chief as contributors here is invaluable because Hidatsa use and production of plants was gendered. For example, while Buffalobird-woman knew quite a lot about tobacco, she and other Hidatsa women did not smoke it or grow it. Tobacco was a plant associated with men’s activities and therefore men maintained tobacco gardens. On the other hand, Hidatsa women grew all of the other domesticated crops, gath-

ered most of the wild plants, wove baskets, and raised earthlodges. Wolf Chief would probably have been unable to describe many of these activities with the same amount of detail as his sister.

The plant-use descriptions provided by Buffalobird-woman and others also include related topics. For example in the section on dogbane, which was used to make cords for snares, Wolf Chief goes on to describe not only how the snares were made but also how they were used and what hunting camps were like. Animal foods, such as bone-grease made from crushed buffalo bones, are described in conjunction with the plant foods they were cooked with. Drying, storage, production and use of containers, and protection of resources are frequently mentioned as well. While these topics are not always directly about the plant being discussed, they provide an interesting glimpse of the larger social and technological settings of Hidatsa plant use. However, they are somewhat scattered throughout the book. If a person is interested in gaining information about Hidatsa storage techniques or use of bags and baskets, for example, it would be fairly difficult to find this information in the book. An index would have been extraordinarily helpful here because of the occasional overlap, repetition, connections, and tangentially related information found in the different sections.

Use of Plants by the Hidatsas of the Northern Plains is full of information that should be useful to anyone interested in the Hidatsa or Native American subsistence practices in general. It is especially helpful for archaeologists interested in plant use during prehistory in the eastern United States. Even though the Hidatsa were adopting new tools from Euro-Americans like iron hoes and axes, they were in many cases applying these new technologies to food sources and practices they had used for much longer. Additionally, Buffalobird-woman's account gives us an excellent glimpse of the roles plants played in the lives of Hidatsa people, many of which would be very hard to distinguish in the archaeological record. For example, while archaeobotanists often consider medicinal uses of plants found at archaeological sites, use of plants for things like dyes and perfumes are less frequently mentioned or considered. The value of wood is another important topic that may be neglected in archaeobotanical studies. While wood procurement was especially important for the Hidatsa because it was scarce in their environment, the variety of Hidatsa uses for wood—for construction, basketry, fuel, and tools—were likely shared by other Native American groups as well. While the book might have been slightly more useful as a reference with more explicit categories or an index, Scullin has done a very good job managing a large amount of data and done a great service to the archaeological community by making this material available. *Use of Plants by the Hidatsa* is an easy, enjoyable read and a unique, valuable source of information on how people used plants.

References

Wilson, Gilbert L. (1917) *Agriculture of the Hidatsa Indians: An Indian Interpretation*. Studies in Social Sciences 9. The University of Minnesota, Minneapolis.