#### ETHNOVETERINARY TREATMENT OF HORSES BY THE GREAT SIOUX NATION



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## INTRODUCTION

- \* Many Native American nations hold a strong reverence for Mother Earth and all living creatures (Gilmore 1977).
  - + Accumulated knowledge about environment through observations.
  - + Skills developed utilizing surrounding flora for food, medicine, homes and clothing.
  - + Plants were also used to care for their horses and other domesticated animals.



# CONNECTIONS BETWEEN HORSES AND THE SIOUX NATION RUNS DEEP



- \* Horses were introduced to the Sioux People by the Cheyenne.
  - By the 18<sup>th</sup> century Sioux had become dependent of horses in daily lives.
    - + Sunka-wakan was the name given to horses which means "sacred dogs" (Bonvillain & Porter 1994).
    - + Quickly adopted for their capability for transportation covering long distances and carrying heavier loads.

#### HORSES REVOLUTIONIZED THE ECONOMY OF THE SIOUX PEOPLE

- Measured a person's wealth by the number of horses a family had.
  - Ownership was a mark of prestige and with this possession families were given respect.
  - Horses beauty, strength, and grace were honored in many stories across the nation.



#### IMPORTANCE OF HORSES TO THE PEOPLE TODAY

- Horses are still used on ranches, for memorial rides, horse races, and during rodeos.
- Most recently horses are being used for equine therapy to assist in understanding behavioral and mental disorders.



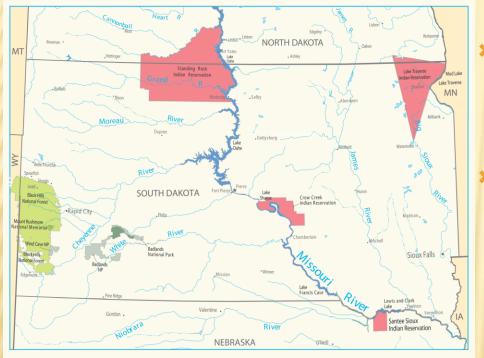


#### STUDY PURPOSE

- The proposed project has three main goals:
  - + 1) Discover and document native plant preparations for ethnoveterinary treatments used for horses through a literature review and interviews from elders and other community members.
  - + 2) Collect, press, and voucher the native plants discussed.
  - + 3) Make this body of knowledge accessible to the community.



# STUDY AREA



 Focus on the Lakota and Dakota People of the Standing Rock Indian Reservation.

 Today, the Great Sioux Nation's territory encompasses some 200,000 km<sup>2</sup> including parts of South Dakota, North Dakota and Nebraska (Minahan 2002).

# STUDY AREA

- EuroAmerican colonization led to the westward migration to the Prairie Bioregion.
  - + Includes mixed grasslands, river basins and occasional outcrops which covers the central region of the US and into Canada (Kindscher 1987, Great Plains Flora Association 1986).
- Sioux composed of seven bands.
  - + Lakota, Dakota and Nakota People
    - × Slight differences in language dialects and geographical locations.



http://sddial.k12.sd.us/ilc/oceti/members.htm

#### **METHODS- INTERVIEWING**

- Prior to the interview, individuals were given an Informed Consent explaining the project to protect their intellectual property rights as requested in Standing Rock's IRB.
- Snowball technique to conduct semi-structured interviews (Bernard 1994; Martin 1996).
  - + Gather information regarding native plants useful to the therapeutic treatment of horses.
- × Methods of recording include
  - + Written notes and audio digital recording where appropriate and with permission.
- Invite experts to continue sharing stories about horses and plants during field interviews.

# METHODS- PLANT COLLECTION

- \* The experience in the field helped us understand culturally how to collect, harvest and prepare plants.
- \* Pressed and vouchered all useful native plants mentioned in interviews and literature.
  - + Vouchers will be deposited at Sitting Bull College and the Missouri Botanical Garden.



Scientific Name	Lakota Name	Use to Treat Horses
Pediomelum argophyllum	Matho thinpsinla	Roots used as energy stimulant
Oenothera suffretescens	Tatawabluska	Chewed plant then rubbed on hands to attract horses



Silverleaf scufpea P. argophyllum



Scarlet Gaura O. suffretenscens

Scientific Name	Lakota Name	Use to Treat Horses
Pascopyrum smithii	Peji hcaka	Excellent forage for horses
Gylcyrrhiza lepidota	Wanawizi cikala	Applied as poultice to sore backs of horses



Western wheatgrass P. smithii



American Licorice G. lepidota

Scientific Name	Lakota Name	Use to Treat Horses
Ratibida columnifera	Asampi iyatke	Whole plant fed to horse to treat urinary tract infection
Dichanthelium oligosanthes	Peji wakan	Believed to be poisonous to horses



Yellow Prairie Cone Flower R. columnifera



Panic Grass D. oligosanthes

Scientific Name	Lakota Name	Use to Treat Horses
Artemsia campetris	Canlogan wastemna	Roots pulverized and put on a sleeping mans face so this horses can be easily stolen
Yucca glauca	Hu pestola	Roots burned to allow horses to be easily caught



Field Sagewort A. campetris

Yucca Y. glauca

Scientific Name	Lakota Name	Use to Treat Horses
Onosmodium molle	Sunkacan kanhuipiye	Used as rubbing solution to relieve sore muscles
Echinacea angustifolia	Ichape hu	Roots burned to ease distemper in horses



False gromwell O. molle



Echinacea E. Angustifolia

Scientific Name	Lakota Name	Use to Treat Horses
Grindelia squarrosa	Pte ichiyuha	Infusion made to relieve cough
Dyssodia papposa	Pispiza tawote	Infusion made to relieve cough



Curlycup gumweed G.Squarrosa



Fetid marigold D. papposa

Scientific Name	Lakota Name	Use to Treat Horses
Populus deltoides	Chanyah u	Inner bark used as forage for horses during harsh winter months
Liatris sp.	Tate e cannuga	Roots may be used to increase endurance or in stories overcome fear of water



Cottonwood P. deltoides



Blazing star Liatris sp.

Scientific Name	Lakota Name	Use to Treat Horses
Juniperus virginiana	Hante sa	Decoction made from leaves and cones to relieve coughs
Astragalus crassicarpus	pte tawote	Considered to be good medicine for horses



Juniper J. virginiana



Groundplum A. crassicarpus

# CONCLUSION

- Information found will be shared in printed and electronic summary forms as a presentation to the public and to the Tribe.
- Study will provide a valuable resource to the community by compiling information that can be used today and for future generations.
- Community members will have access to the voucher specimens and compiled interview data for purposes of learning and education.
  - + As a tool to preserve their traditional ecological knowledge.
  - + Encouragement for the launch of new scientific research projects and community activities.
  - + Species identified as most important to the community can be targeted for future conservation and restoration activities.

# CONCLUSION

- Plants are still a vital part to the community of Standing Rock
- × The significance of plants extends to the care of their horses.
- Horses play an increasingly important role within this society from their n equine assi

"These horses are a mirror to your soul. This horse will show all the emotions you are feeling"- Phillip Bird Horse (shown with grandson Urijah Truth, seventh generation descendent of Chief Running Antelope)

## REFERENCES

- Bernard, H. Russell. Research methods in anthropology: qualitative and quantitative approaches. 2nd ed. Thousand Oaks, CA: Sage Publications, 1994. Print
- Gilmore, Melvin R.. Uses of plants by the Indians of the Missouri River region. Lincoln: University of Nebraska Press, 1977. Print.
- Kindscher, Kelly. Edible wild plants of the prairie: an ethnobotanical guide.
  Lawrence, Kan.: University Press of Kansas, 1987. Print
- Martin, Gary J.. Ethnobotany: a methods manual. Repr. ed. London [u.a.: Chapman & Hall, 1996. Print.
- McGregor, Ronald L., Flora of the Great Plains. Lawrence, Kan.: University Press of Kansas, 1986. Print.
- Moerman, Daniel E.. Native American ethnobotany. Portland, Or.: Timber Press, 1998. Print.

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#### Leona Many Wounds- Claymore Great Grandma



# **QUESTIONS?**



Mitakuye Oyasin We are all related