

Prairie Grassland Ecosystem

Basic Overview and Impact on Pollinators

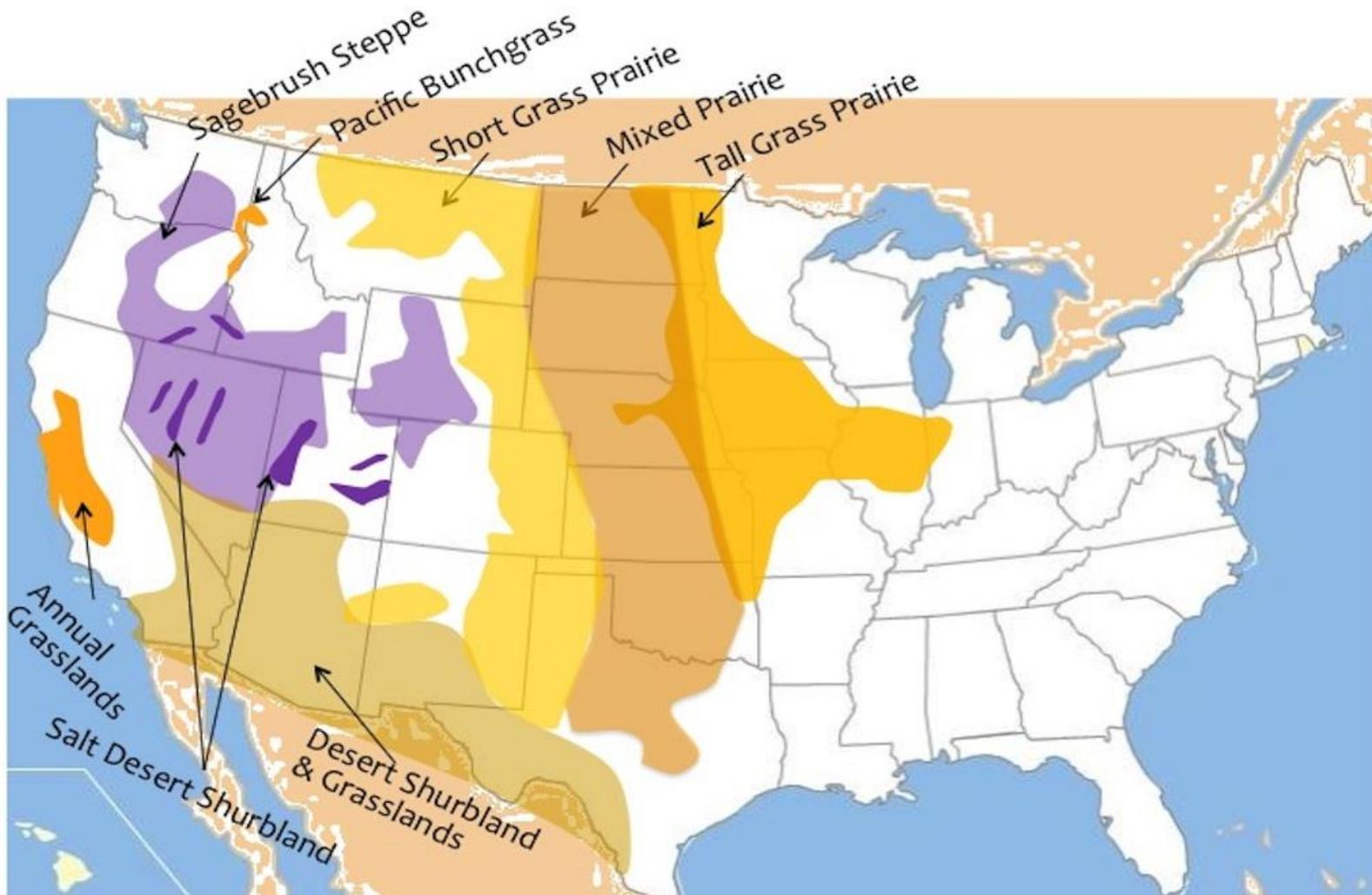
Created by: Tribal Alliance for Pollinators



What is a Prairie?

- There are a number of different types of prairies, but very generally they refer to:
- An ecosystem of grasslands, savannahs, and shrublands characterised by temperate climate, moderate rainfall, and dominant vegetation of grasses, herbs, shrubs, and wildflowers.
- It would take countless hours and slides to go into all of the interactions within all of the different types of prairies, but here is a brief overview





We Are All Connected



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History of the North American Prairies

- The history of the prairies is long, but we'll touch on a few key, post colonial points here
- Destruction of prairies due to increased agricultural practices (specifically for corn, soy and other monocultures (practice of growing large quantities of one species allowing no other plants to live with them, and overgrazing) and development
- Less than best management practices that became the standard greatly contributed to The Dust Bowl in 1930s



History of the North American Prairies

- Continued Grassland Conversion from native prairies to agricultural purposes, now mostly for livestock consumption
- Purposeful, near eradication of bison in an attempt to gain control of Native American populations
- Wildfire suppression for decades has also lead to the encroachment of woody species native and non-native



History of the North American Prairies

- Thankfully, some better practices are growing in popularity such as little to no till, rotational grazing, integrated pest management, and others. For more, in-depth descriptions of best management practices, see [Regenerative Agriculture](#).



Impact on Pollinators

Migratory courses have changed, propagatory host plants have catastrophically decreased in prevalence, and habitat in general has greatly decreased. As a result:

- Fewer places to lay eggs
- Fewer things to eat
- Prevalence of harmful chemicals
 - This point includes use in agriculture as well as many plants available at many big box stores being pretreated



The Human Element (The Bad)

- Decades of degrading practices
 - Monoculture agriculture
 - Blanket application of pesticides
 - Fire suppression
 - Introduction of non-native invasive species
 - Ex: Japanese honeysuckle, Callery pear, Johnson Grass, etc
 - Completely altering the ecosystem through increased development



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We cannot just leave “nature to be nature” after so many changes have taken place. Habitats are so damaged due human negligence that prairie ecosystems require our help in returning, at least somewhat, to a state that resembles their original glory.



The Human Element (The Good)

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 - Native Plant Societies
 - Monarch Watch
 - NRCS
 - Oklahoma Fish and Wildlife
 - Tribal Alliance for Pollinators
 - The Gathering Place
 - And others



Additional Resources

Amsel, Sheri. "American Prairie Food Web" Exploring Nature Educational Resource ©2005-2019. May 28, 2019. <http://www.exploringnature.org/db/view/American-Prairie-Food-Web>

George, Jean Craighead, and Wendell Minor. *The Buffalo Are Back*. Dutton Children's Books, 2011.

National Geographic Society. "Prairie." *National Geographic Society*, 9 Oct. 2012, www.nationalgeographic.org/encyclopedia/prairie/

National Park Service description: <https://www.nps.gov/tapr/learn/nature/a-complex-prairie-ecosystem.htm>

Department of Natural Resources Minnesota: <https://www.nps.gov/tapr/learn/nature/a-complex-prairie-ecosystem.htm>



For More Information

Become a member of the Tribal Alliance for Pollinators to receive information about how you and your tribe can support pollinators!

- Current tasks you could be doing for your restoration projects
- Upcoming workshops
- Online webinars and training videos

Visit our website for more information!

<https://tribalallianceforpollinators.com/>

