

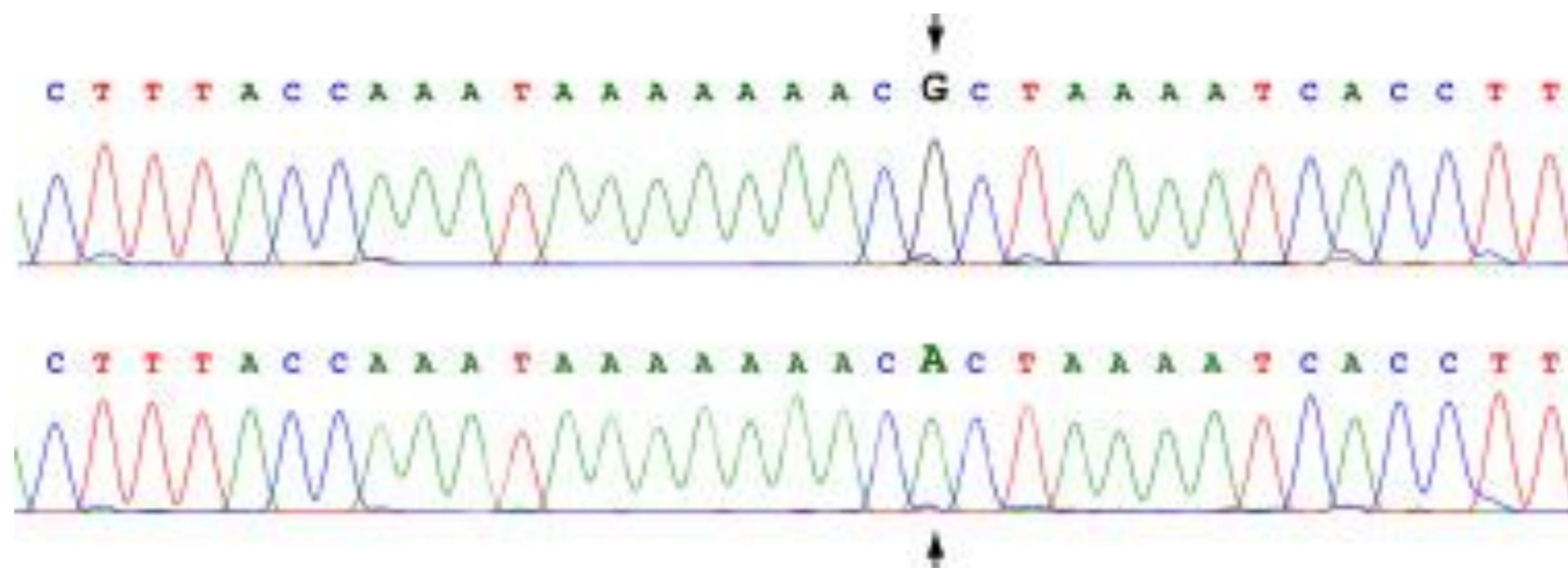
Influence of Cattle Grazing on Milkweed and Other Native Forbs

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ABSTRACT

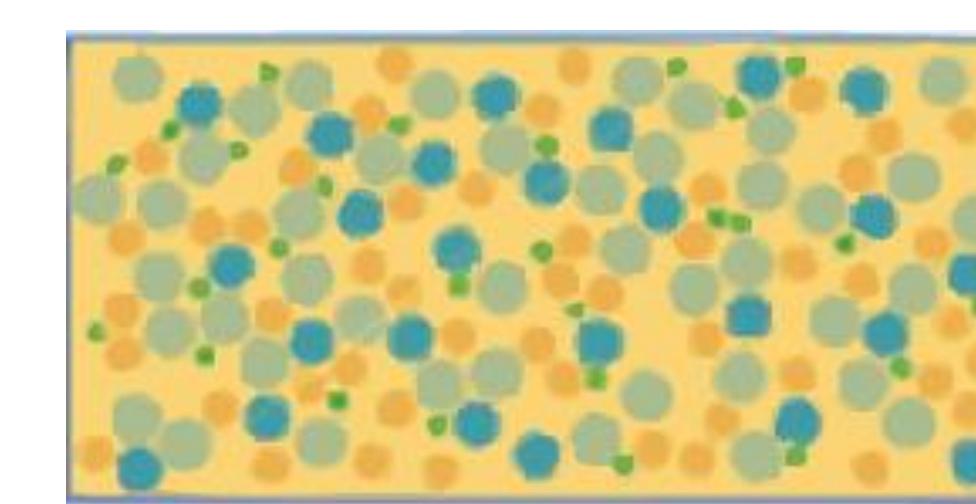
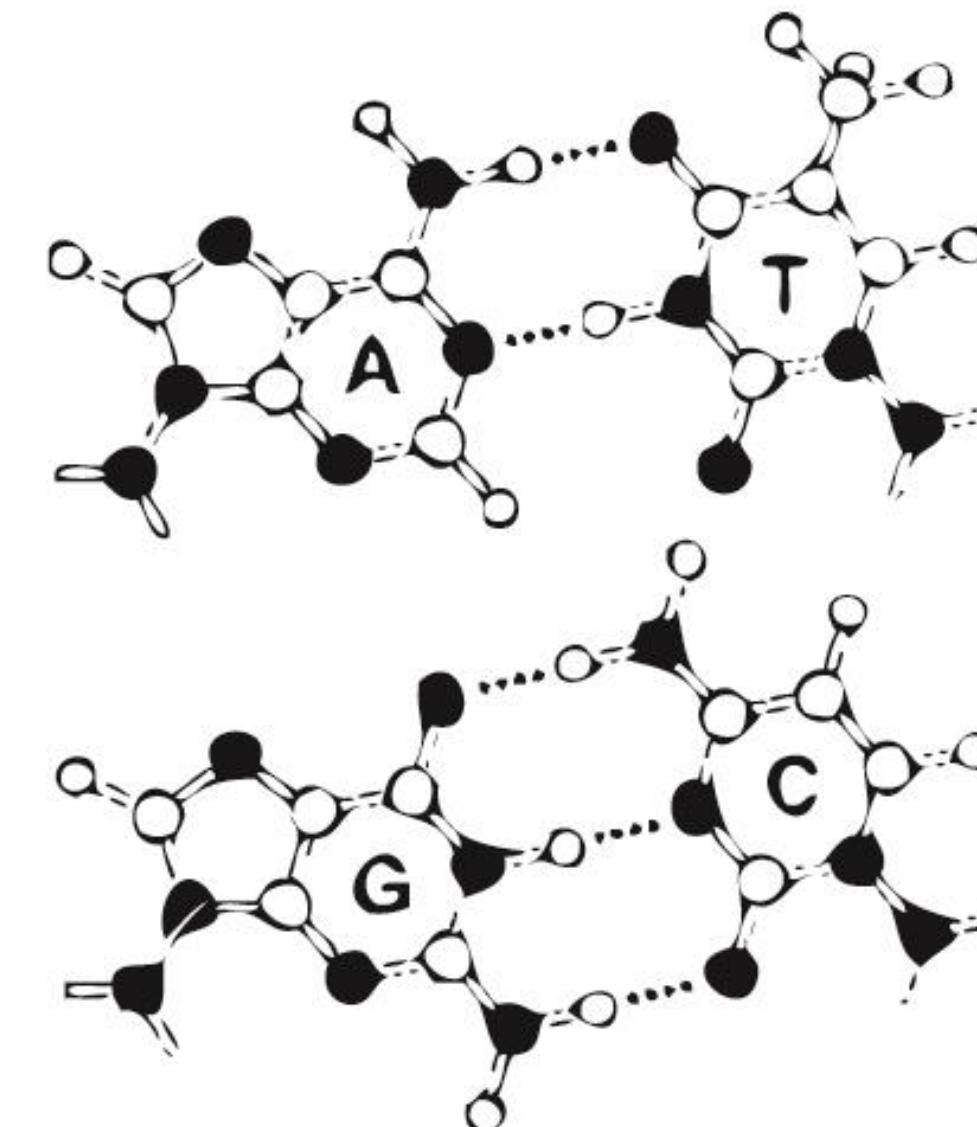
One of the most identifiable plants of the Great Plains are milkweed species (*Asclepias spp.*), which are also the only food source for monarch butterfly caterpillars (*Danaus plexippus*). Conservation of the milkweed population has taken renewed importance as the population of eastern migratory monarchs has dropped by over 80% from 1996 to 2017, largely because of a loss of over 1.3 billion stems of milkweed. As a result of this monarch population decline, it has been petitioned to protect the monarch butterfly population under the US Endangered Species Act. To increase the population size of the eastern migratory monarch, conservation groups are aiming to increase milkweed abundance by 1.6 billion stems. However, efforts to increase milkweed abundance have entirely focused on ungrazed land and have ignored the 770 million acres of rangeland in the USA, 43% of which is managed federally. To maximize increases in milkweed abundance, it is critical to find rangeland management methods that maximize milkweed density. Critical features of rangeland in relation to milkweed are the number of animals and timing of grazing. In April through September of 2019, monthly visits were made to 13 prairie sites in the Platte River Prairies in south central Nebraska. At each site, two random 100m transects were walked to look for the presence of milkweed, selected forbs, and grazing on the milkweed stems. The data shows the relationship between the grazing intensity, measured in AUM (animal unit per month), to milkweed abundance and percentage of grazed stems.

Research Methods



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 Sampling took place at 11 sites in the Platte River Prairie, near to Grand Island. At each site, two random parallel transects were selected and walked. In each transect, the number of selected forbs was noted. Hoary vervain (*Verbena stricta*), common yarrow (*Achillea millefolium*), maximillion sunflower (nis exped et et ommolupta volupti dit volupis suntion sequati non nume conserit porporo doloren ihiliquo omnienda dolupta doluptat officiae preseratur? Cab illum vellore ntint. Ehendic tatiam vent lab in prepellam de odisi inus ipsam harit audionecti cupienimil ex eos mo que la dolor reped qui incilit atquam escitae ruptat eveliam rem litassimus iusae atem quo coreper rumqui verrum sed quidesto explige ndundan ditorr orerias aliqui nimilia dicit que num endit rherchitatur re, sunt, non ne nobitium dunt quoditia nistiosant rempore valor as alit reptat dit et que Eatum reperfere vit as utaero berferati andi quis doloreiciat quiati undipsandi conem. Exero dolo qui dipsam, sapersp ereum quia aut idelentiae nullendae ndundan ditorr orerias aliqui nimilia dicit que num endit rherchitatur re, sunt, non ne nobitium dunt quoditia nistiosant rempore valor as alit reptat dit et que

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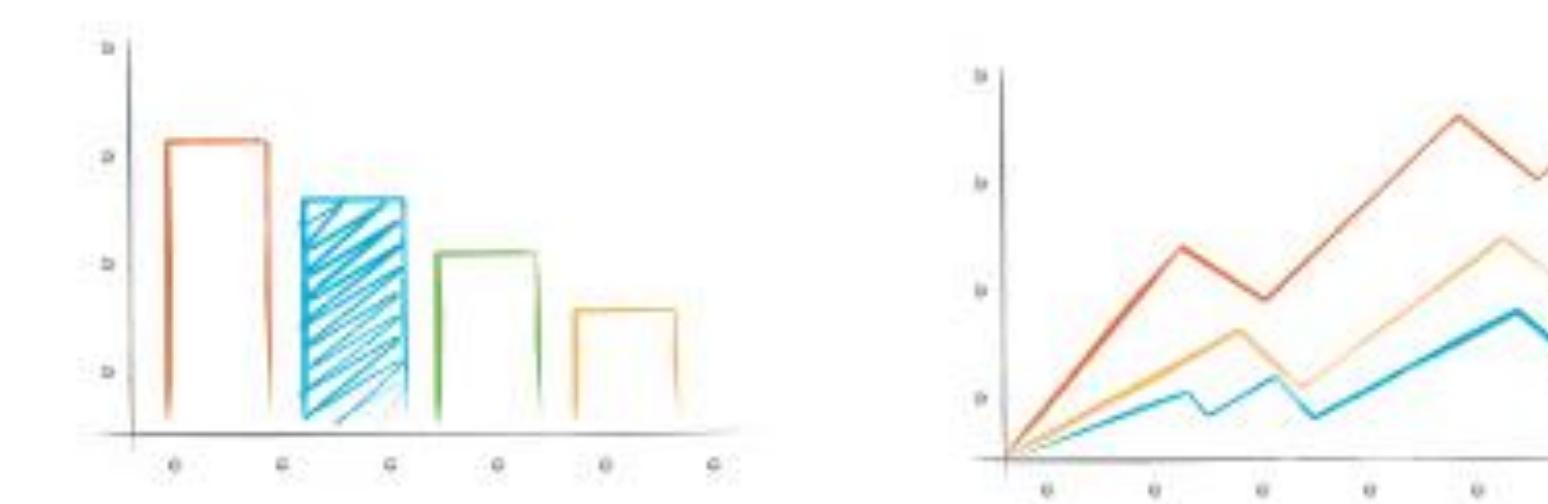
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Conclusion and Future Directions

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References

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