

Dear Dr. XXX,

The Missouri Prairie Foundation (MPF) grants permission for you to collect soil samples from MPF prairies:

Plant lists for all sites have been developed and numerous state-listed plants occur on them.

MPF allows for soil collection at four sites, provided collection is limited to approximately one cubic foot per site. Therefore, any potentially negative impacts to listed species should be minimal to non-existent.

As you complete your study, MPF requests:

- ---photos of soil collection
- -inclusion of MPF in study acknowledgements
- -link to published article
- --submission of an article (for a lay audience) for the Missouri Prairie Journal.

We are pleased to collaborate with you on your important research.

Sincerely,

XXX Executive Director



Dear Mr. XXX,

Per your request to conduct research on four sites owned and managed by the Missouri Prairie Foundation, the staff and board has evaluated the effects of removal of approximately one cubic foot of soil at each site. Each site was evaluated on possible effects of the soil sample removal on potential federal or state rare or endangered flora that may be present. All sites have a comprehensive list of plant species present, compiled from numerous visits by trained botanists and ecologists. Each visit recorded species observed and if any rare or endangered species were present.

Site 1

Golden Prairie in Baron County, acquired in 1970 and 1974, is 320 acres of remnant unplowed prairie.

Golden Prairie is primarily a dry-mesic sandstone/shale prairie that supports 320 native plant species, with an average coefficient of conservatism of 4.06. No rare or endangered plant species have been recorded.

## Site 2

Linden's Prairie in Lawrence County, acquired in 2014, is 171 acres of remnant unplowed prairie.

Linden's Prairie is predominantly a dry-mesic chert prairie. This prairie supports 198 native plant species with an average coefficient of conservatism of 4.69.

The only state-listed plant species of conservation concern is a moss (*Trematodon longicollis*), which is found in one sinkhole and would be unaffected by this sampling.

## Site 3

Schuette Prairie in Polk County, acquired in 2020, is 40 acres with 34 acres of remnant unplowed prairie.

Schuette Prairie is primarily a dry-mesic limestone/dolomite prairie that supports 205 native plant species with an average coefficient of conservatism of 4.84.

In 2021 eight stems of the federally threatened Mead's Milkweed (*Asclepias meadii*) were found in the southern portion of the prairie. This soil sample would not be in that part of the prairie and therefore the Mead's Milkweed population would not be affected.

## Site 4

Edgar W. Schmidt Sand Prairie in Scott County, acquired in 2021, is 55 acres.

The Edgar W. Schmidt Prairie is predominantly sand prairie that supports 219 native plant species with an average coefficient of conservatism of 4.08.

There are 16 state-listed plants of conservation concern on the property, but five were planted there and several more only occur in the swale and woodland. Since these sand prairie species, even the rare ones, are adapted to readily colonize open sand, taking one small soil sample from the middle of prairie will not degrade any of their populations.

For the reasons outlined above we feel that the very small disturbance from collecting these soil samples will not be detrimental to any rare species on the four sites to be sampled. We therefore grant approval to this research request.

Sincerely,

XXX Vice-President for Science & Management Missouri Prairie Foundation