

GRASSLAND SITES REVIEWED

Coupland, R.T. 1973. A theme study of Natural Grassland in Western Canada, A Report to National and Historic Parks Branch, Canada Dept. of Indian Affairs and Northern Development. Project 90/7-P1. Contracts 72-5 and 72-91. 176 + 104 pp.

This report, "an inventory of relatively undisturbed or unspoiled areas having plant communities representative of the various natural grassland types with an assessment...", is a major work and a mine of information for those interested in natural grasslands. If, like me, you have found it frustratingly difficult to garner information on location and general ecology of natural grassland sites in Canada, this report, although already 12 years old, will provide many of the preliminary details that you need.

In its 176 pages Dr. Coupland covers topics such as Characteristics of plant species of grassland, Physical characteristics of grassland, The classification of grasslands, and Human impact on western Canadian grasslands. The section on Classification of grasslands is extensive, with subsections on the climax communities (Mixed, Fescue, True and Palouse Prairie) as well as a characterization of subclimax communities (e.g., slough-meadow complexes).

Over half the report is devoted to an 'Inventory of Extensive Areas of Natural Grassland' followed by a consideration of selected areas in terms of their national significance. Initially 57 sites (based on a minimum criterion of 100 square miles of uncultivated grassland) were chosen, as Dr. Coupland points out, on the basis of land use maps rather than personal observation. One page summary descriptions of most of these sites (23 in Alberta, 29 in Saskatchewan) are given in Appendix I. This appendix is particularly valuable to those wishing to collect in natural grasslands because the sites are described under the following headings: location, area and ownership, physical characteristics, biological characteristics including invertebrates and the major herbaceous communities, and human impact. Sites covered in Alberta and Saskatchewan are:

Alberta

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|------------------------|------------------------|
| 1. Manyberries | 16. Fort McLeod |
| 2. Milk River Badlands | 17. Sounding Creek |
| 3. Cypress Hills | 18. Kirkpatrick Lake |
| 4. Pakowski Lake | 19. Grassy Island Lake |
| 5. Suffield | 20. Sounding Lake |
| 6. Vauxhall | 21. Big Valley |
| 7. Lake Newell | 22. Porcupine Hills |
| 8. Bassano | 23. Wainwright |

9. Dinosaur
10. Empress
11. Drumheller
12. Hanna
13. Milk River Ridge
14. Blood Indian Reserve
15. Waterton

Saskatchewan

1. Cypress Hills
2. Govenlock
3. Eastend
4. Val Marie-Wood Mountain
5. Wise Creek
6. Big Muddy Lake
7. Bitter Lake
8. Great Sand Hills

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|---------------------|------------------------|
| 9. Matador | |
| 10. Mantario | 20. Pike Lake |
| 11. Court | 21. Manito Lake |
| 12. Webb Sand Hills | 22. Paynton |
| 13. Old Wives Lake | 23. Red Pheasant |
| 14. Chaplin Lake | 24. Quill Lakes |
| 15. Riverhurst | 25. Last Mountain Lake |
| 16. Coalfield | 26. Elbow |
| 17. Radville | 27. Moose Mountain |
| 18. Yellow Grass | 28. Qu'Appelle Valley |
| 19. Dundurn | 29. Spy Hill |

Two areas meeting the 100 sq. mile criterion are listed for Manitoba, and 3 for British Columbia: Batchelor Range, White and Long Lakes area, Beechers Prairie.

In Appendix II, Dr. Coupland lists areas in western Canada that are considered to be potential natural reserves. Areas were analysed on the basis of vegetation only, considering Fescue, Mixed, Palouse and True Prairie separately. Areas containing Mixed Prairie in the Aspen grove region were omitted. Again, areas were chosen not on the basis of personal observation but using more detailed land use maps, and aerial photographs (not necessarily up-to-date). As Dr. Coupland implies, the area of natural grassland in the initial 57 sites chosen and those listed as potential natural reserves are best estimates based on the limited available information. Mixed Prairie areas considered to be potential natural reserves are found in parts of Alberta Nos 1, 2, 5-10, 12, 17-19, 23 and Saskatchewan Nos 2, 4, 5, 7-11. Maps outlining each of these areas on a township grid are included, in addition to a summary description in Appendix II. Fescue Prairie areas considered to be potential natural reserves are found in parts of Alberta Nos 3, 11, 13-16, 20-22 and Saskatchewan Nos 1, 3. Again maps are given in addition to further summary descriptions in Appendix II. Appendix II lists 9 sites in Manitoba considered to be potential natural reserves, among which only the St. James Prairie in Winnipeg and the Stony Mountain Prairie are considered True Prairie. Similarly 9 sites of Palouse Prairie are considered potential natural reserves in B.C. and are summarized in Appendix II.

Any limitations of this report seem to result primarily from the often narrow and out-of-date information that Dr. Coupland had to use as a basis for his site selection; he was unable to supplement aerial photos and land use maps with personal observation. However, future visitors to, and collectors in, these areas can supply these types of data, as has been done in various issues of the Grassland Newsletter of the Biological Survey.

This report, especially the appendices, is invaluable. It is available on loan through your library from: Interlibrary loans, Chaudière Branch, Environment Canada Library, Ottawa, KIA 1G2. (Tel. (613)-997-7434)

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