



IRON RANGE OFF-HIGHWAY VEHICLE RECREATION AREA FLORISTIC SURVEY RESULTS

03/08/1999

GILBERT SITE

07/29/97 - 08/21/97 *General Floristic Inventory. Deb Shubat, Contract Botanist. Findings:*

- No *Caltha natans* (Floating Marsh Marigold) located;
- Several USFS 'watch species' found, one species never before found in St. Louis Co.;
- *Botrychium rugulosum* (St. Lawrence Grapefern) positively identified (ETS species').

10/22/97 *Botrychium Inventory. Welby Smith (DNR), Karen Myhre, Rolf Dahle, Audry Engle, Gary Walton, Deb Shubat, Field Botanists. Findings:*

- Sizable *Botrychium* populations identified and mapped and flagged; (GPS)
- Species - *B. multifidum*, *dissectum*, *rugulosum*, *pallidum* & *rugulosum* X.

04/16/98 - 04/18/98 *Botrychium Inventory. Welby Smith, DNR Botanist. Findings:*

- Refined population estimates and areal coverage for DNR/LAAC use in evaluating alternative site designs. Mapped, flagged and GPS-located critical plant habitat.
- Added survey work recommended prior to construction/site development to minimize intrusion into or disturbance of *Botrychium* populations.

08/09/99 – 08/16/99 *Botrychium Taxonomic Field Study. Welby Smith (DNR), Karen Myhre, Rolf Dahle, Audry Engle, Gary Walton, Deb Shubat, Field Botanists. Findings:*

- Taxonomic research begun by Dr. Herb Wagner, Univ. of Michigan to determine whether unidentified *Botrychium* specimens are hybrids or previously unknown species.
- Ongoing research funded, in part, by MN DNR through Natural Heritage Program and through funding appropriated for development of the Iron Range OHV Recreation Area.

08/14/99 & 08/22/99 *Delineation of Botrychium Habitat. Gary Walton & Deb Shubat, Consulting Botanists. Findings:*

- Mapped, flagged and GPS-located critical plant habitat boundaries, including a 50' buffer. DNR will fence habitat areas prior to site development to protect and minimize intrusion into primary habitat areas.

IRON RANGE OHVRA FLORISTIC SURVEY RESULTS [Con't]

VIRGINIA SITE

04/16/98 - 04/28/98 *Botrychium Search - 25 Acre Basin. Gary Walton, Botanist. Findings:*

- Six fronds of *Botrychium multifidum* identified among sparse covering of grasses, lichens, moss, goldenrod and hawkweed. No ETS species present.

11/02/98 - 11/04/98 *General Floristic Survey. Gary Walton/Deb Shubat, Botanists. Findings:*

- Three (3) habitats checked (i.e., mature forest, disturbed mineland, old homestead);
- 169 taxa recorded, no state or federally-listed species identified;
- *Botrychium multifidum* found, suggested resurvey during (both) spring & summer growing seasons;
- Comparatively little soil development as compared with gilbert basins.

08/07/99 - 08/08/99 *General Floristic Inventory – 3,325 Acre Site. Gary Walton and Deb Shubat, Consulting Botanists. Findings:*

- No state or federally-listed ETS species identified among the 318 taxa sited.
- Seven (7) distinct habitat types were identified and described on the Virginia Site. Species checklists were prepared. Types range from dense mature forest to scrub, cutover wetland and open grasses. Disturbed areas show little soil development.
- Spring inventory would be necessary to identify Spring ephemerals. Scattered groups of *Botrychium multifidum* and *virginianum* were identified on the site.

MESABI RANGE - TAILINGS BASINS (Itasca & St. Louis Co.)

04/16/98 - 04/28/98 *General Floristic Survey. Gary Walton, Field Botanist. Findings:*

- All six sites (275 ac total) share mining/reclamation histories similar to Gilbert basins;
- *Botrychium rugulosum* identified at two (2) sites; (not Virginia Site)
- *B. simplex*, *B. multifidum*, *B. dissectum* & *B. matricarifolium* found - not listed;
- *B. michiganense* and *Eleocharis nitida* (Neat Spikerush) also noted - ETS species.

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