



Directory Riding Mountain National Park GIS Lessons

This group of lessons touches on many aspects of the curriculum including Social Studies, Science, sustainability, creative arts, and languages:

- Investigating how human activities affect ecosystems;
- Identifying elements of physical and human geography;
- Promote actions that reflect principles of environmental stewardship and sustainability;
- Reconsidering personal assumptions based on new information and ideas;
- Using of appropriate tools and technologies such as GPS and GIS to accomplish tasks and creating maps;
- Discussing the potential consequences of introducing new species and of species of extinction to an ecosystem;
- Reflecting on how the biodiversity of an ecosystem contributes to its sustainability;
- Identifying ways in which competing interests and needs influence control and use of land;
- Experimenting with a variety of ways to communicate ideas for different audiences and purposes through various means.
- Propose and defend innovative options or solutions to address issues and problems.

Focus on fire – A Look at Prescribed Burning in Riding Mountain National Park

- ArcView 3x instructions doc [beginner](#)
- ArcGIS 9x instructions doc [beginner](#)
- Results- Prescribed burning in RMNP map
 - what your map should look like in 3x (jpg)
 - what your map should look like in 9x (jpg)
- Resources
 - prescribed burn photos (includes photos of cultural artefacts)
 - interview video (Steve Cornelson)
 - map of RMNP
- Songs of Riding Mountain
 - Song : 'Grassland RAP' (mpg)
 - Song lyrics – 'Grassland RAP'
- GIS data
- Parks Canada Fact sheets
 - Be FireSmart, Be Prepared
 - From Fire Suppression to Prescribed Burning
 - Controlling Wildfire
 - Wildlife and Fire
 - Ecosystem Management
 - Why Prescribed fire Instead of Logging
 - Prescribed Fire
 - Protecting Communities
 - Fire Suppressant
 - Where there's fire
 - Whitebark Pine
 - Natural Processes
 - RMNP FireSmart booklet
 - RMNP FireSmart Panel



- Glossary
- Challenge Options
 - Includes Debate, FireSmart and the Homeowner Role play, Poetry
- Web Links

Intruder alert – *High-Risk Areas for Invasive Plant Species Expansion in Riding Mountain national park*

- ArcView 3x instructions doc [Intermediate](#)
- ArcGIS 9x instructions doc [Intermediate](#)
- Results- High Risk area Map
 - what your map should look like in 3x jpg
 - what your map should look like in 9x jpg
- Resources
 - interview video (Wybo Vanderschuit)
 - map of RMNP
- GIS data
- Parks Canada Fact sheets
 - Invasive species and RMNP
 - Top Five Invasive Plants
- Glossary
- Challenge Options
- Web Links

Weasel Waypoints – *Maintaining Ecological Integrity; Re-introduction of Species in RMNP*

- ArcView 3x instructions doc [Intermediate](#)
- ArcGIS 9x instructions doc [Intermediate](#)
- Results – ‘Pine Marten Habitat Ranges in RMNP’ map
 - what your map should look like in 3x jpg
 - what your map should look like in 9x jpg
- Resources
 - Photos
 - Interview video (Glenn Schmidt)
 - Marten Habitat Range Data Sheet
 - Where’s the weasel powerpoint
 - map of RMNP
- Songs of Riding Mountain
 - Song : ‘Mustelids’ (mpg)
 - Song lyrics – ‘Mustelids’
- GIS data
- Parks Canada Fact Sheets
 - Pine Marten Biology
 - Re-introduction of the pine marten to RMNP
 - Species at Risk Act

- Glossary
- Challenge Options
 - Includes activities and lessons such as Bison re-introduction, Creating a Species at Risk poster, Tract transect activity, Writing a news report
- Web Links
 - Includes links to more lessons on the Parks Canada Teachers Resource Centre on Species at Risk and Re-introduction of Species .

Roadkill Retrospect – A study of Vehicle-Caused Wildlife Mortality Along Hwy10 through RMNP

- ArcView 3x instructions doc [Advanced](#)
- ArcGIS 9x instructions doc [Advanced](#)
- Results – Vehicle-caused Wildlife Mortality Map
 - what your map should look like in 3x jpg
 - what your map should look like in 9x jpg
- Resources
 - Photos
 - Map of RMNP
- GIS data
- Parks Canada Fact sheets
 - Limiting Wildlife Mortalities on Hwy. 10
- Glossary
- Challenge Options
 - Includes Designing a Public awareness campaign
- Web Links

Tracing Trails - Proposing a Loop Extension of RMNP's Arrowhead Trail

- ArcView 3x instructions doc [advanced](#)
- ArcGIS 9x instructions doc [advanced](#)
- Results – map of proposed loop
 - what your map should look like in 3x jpg
 - what your map should look like in 9x jpg
- Resources
 - Photos
 - Map of RMNP
- GIS data
- Parks Canada Fact sheets
 - Successful Trail Design
- Glossary
- Challenge Options

Prairie Mountain – Hiking/Camping Options on the Manitoba Escarpment in RMNP

- ArcView 3x instructions doc [advanced](#)
- ArcGIS 9x instructions doc [advanced](#)
- Results – escarpment map

- what your map should look like in 3x jpg
 - what your map should look like in 9x jpg
- Resources
 - Escarpment photos
 - Map of RMNP
- GIS data
- Parks Canada Fact sheets
 - Flora and Fauna of the MB Escarpment and RMNP
 - Geological History of the Manitoba Escarpment
 - History of the MB Escarpment
- Glossary
- Challenge Options

Welcome teachers

Readme – teacher and IT instructions

Required Extensions

Teacher evaluation

Tips for Teachers