

## Richardson Ground Squirrel (RGS) Control

**Dale Harvey**

Saskatchewan Association of Rural Municipalities

| SPG Contributions | Project Status | Duration/Timeline of Project (Year to Year) | Co-funders  | Total Project Cost |
|-------------------|----------------|---|---|--------------------|
| \$7,000.00        | Completed      | May 2010 – March 2011                       | Canadian Agricultural Adaptation Program (CAAP); Saskatchewan Canola Development Commission | \$199,334.00       |

### Project Description

To test various attractants that may be used with various control methods to enhance their control efficacy; to assess the control efficacy of different strychnine formulas; to test currently available bait stations with strychnine treated oats for efficacy and selectivity; to test the efficacy of multi-capture pen traps baited with strychnine treated oats on a small scale.

### Outcome

The control efficacy of freshly mixed 0.4% strychnine baits varied considerable among years and seasons. Data suggest that freshly manufactured strychnine is more effective than strychnine that has been produced many years ago or stored over winter. Differences observed in control efficacy from 2008 (drought year) to 2010 (wet year), and between spring and summer 2010, suggest that Richardson's ground squirrels are less receptive to man made baits when natural food is abundant. It is recommended that strychnine baits be studied and improved to be effective under different environmental conditions. The lack of attractiveness of strychnine baits partly explains poor control success with pen traps, and it is recommended that further work be conducted on the development and testing of multi-capture pen traps.

### Research Objective

#### OBJECTIVE 1

To test various attractants that may be used with various control methods to enhance their control efficacy.

#### OBJECTIVE 4

To test the efficacy of multi-capture pen traps baited with strychnine-treated oats on a small scale.

#### OBJECTIVE 2

To assess the control efficacy of different strychnine formulas.

#### OBJECTIVE 3

To test currently available bait stations with strychnine-treated oats for efficacy and selectivity.