

Fall 2011 Spruce Budworm Statistics: Contacts, Citation, Constraints & Keywords

Contact

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Citation

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General Constraints and Security

Access Constraints:	General public access via the external ESRD web site.
Use Constraints:	General public use. See Disclaimer at: srd.alberta.ca/LandsForests/ForestManagement/ForestManagementStatistics

Security Information:

Security Classification:	Unrestricted
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Keywords

Keywords:	spruce budworm; forest pests; spruce budworm survey results; spruce budworm pheromone traps; Choristoneura fumiferana; tree pests; spruce budworm pheromone survey result statistics; pheromone-baited traps; forest health; managing forest pests; spruce budworm surveys; defoliator; aerial surveys; white spruce
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Fall 2011 Spruce Budworm Statistics: Tables 1 and 2, and Figures 3 and 4

General	
Title:	2007-2011 Spruce Budworm Aerial Survey Tabular Data
Abstract:	These datasets summarize the 2007-2011 Spruce Budworm Aerial Survey data. These surveys were conducted by Alberta Environment and Sustainable Resource Development.
Purpose:	To obtain a general overview of the extent of damage caused by the spruce budworm to the Land-use Framework Planning Regions in the province.
Supplemental Information:	<p>The survey data were collected using the procedures from "Forest Health Aerial Survey Manual", Alberta Environment, May 1999. These surveys were conducted over forested public land where infestations are known to occur, for operational purposes. A summarized version of this procedure is available at:</p> <p>http://www.srd.alberta.ca/LandsForests/ForestHealth/ForestHealthDataStandards/Default.aspx</p> <p>There may be additional defoliated areas that are yet to be detected. The area excludes Wood Buffalo National Park. The area defoliated was estimated for each Land-use Framework Planning Region.</p>
Time Period and Status	
Time Period of Content:	Survey Year (2007-2011) From: June To: July
Maintenance Progress:	Preliminary
Update Frequency:	Annual
Date of Last Update	2011-09-30
Data Quality and Process Information	
Source Information:	The survey dataset for each year was digitized double precision using TTM coordinates in ArcInfo from 1:250,000 base maps. These surveys were conducted by Forest Health Officers between late June to end of July of each survey year.
Assumptions:	<ol style="list-style-type: none"> 1. Large areas of defoliation may have a combination of moderate, and severe defoliation, but are classed by the most common severity rating for that area. Damage was too extensive to justify recording these areas individually. Light defoliation is not mapped as it is too difficult to see during aerial surveys. 2. The defoliation recorded was caused by the spruce budworm. 3. May include inventoried (net area) as well as non-inventoried area (gross area) so some non-host trees

	may be included in areas without inventory data.
Process Description:	<p>The polygons were captured using a digital sketch mapping program on a tablet PC and was also hand sketched on 1:250,000 maps while flying in a fixed wing aircraft (Cessna 210), visibility approximately 10km. The polygons were digitized from the aerial survey.</p> <p>The statistics were calculated by overlaying 2007-2011 aerial survey data with Land-use Framework Planning Regions.</p>
Process Date	2011-09-30
Attribute Information	
Attribute Description:	<p>Land-use Framework Planning Region - seven regions established by the Government of Alberta for regional planning.</p> <p>Total area of defoliation (ha)- the number of hectares of spruce budworm defoliation recorded during aerial surveys. The severity categories are as follows: Moderate = 36-70% defoliation; Severe = >70% defoliation</p> <p>Region Total- the total extent (in hectares) of spruce budworm defoliation observed during aerial surveys over each Land-use Framework Planning Region.</p> <p>Provincial Total- the total extent (in hectares) of spruce budworm defoliation observed during aerial surveys in Alberta.</p> <p>Year- The Survey Year between June & July, 2007 to 2011</p> <p>See also Glossary of Terms</p>

Fall 2011 Spruce Budworm Statistics: Table 3 & Figure 6

General	
Title:	2011 Spruce Budworm Pheromone Survey Data
Abstract:	These datasets summarize the 2011 Spruce Budworm Pheromone Survey data. These surveys were conducted by Alberta Environment and Sustainable Resource Development.
Purpose:	To obtain a general overview of the spruce budworm male moth counts for the Land-use Framework Planning Regions in the province and to use these to predict the risk of a spruce budworm outbreak occurring over a given area in the following year (2012).
Supplemental Information:	The survey data were collected using the procedures from "Use of Pheromone Traps to Monitor the Eastern Spruce Budworm", Alberta Sustainable Resource Development. These surveys were conducted for operational purposes over the forested Alberta public land and do not cover the entire forested provincial land base.
Time Period and Status	
Time Period of Content:	Survey Year From: June 1, 2011 To: September 30, 2011
Maintenance Progress:	Preliminary
Update Frequency:	Annual
Date of Last Update	2011-11-30
Data Quality and Process Information	
Source Information:	These surveys were conducted by Forest Health Officers from June to September. The survey data were entered into the Forest Health Component of the Fire Information Resource System (FIRES) database.
Assumptions:	To sample adult male moths, pheromone traps are set up by late June at the same locations year after year, if possible unless a plot needs to be moved to a better site.
Process Description:	Summarized Crystal reports were brought into MSExcel and analyzed using pivot tables.
Process Date	2011-10-08
Attribute Information	
Attribute Description:	<p>Land-use Framework Planning Region - seven regions established by the Government of Alberta for regional planning.</p> <p>Number of moths per trap for each risk category: the moth count in each trap by the category of risk of a budworm outbreak in 2012, which includes: Low (0-499 moths/trap); Moderate (500-2000 moths/trap) ; High (> 2000 moths/trap)</p>

	<p>Minimum: the minimum spruce budworm moth count/trap</p> <p>Maximum: the maximum spruce budworm moth count/trap</p> <p>Average: the average spruce budworm moth count/trap. There were two traps per site.</p> <p># of sites: the number of pheromone trap locations within each Land-use Framework Planning Region</p> <p>See also Glossary of Terms</p>
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