Editor’s Overview

IPM is heading into another busy field season. The blackheaded budworm in Cape Breton and the pale winged grey in the western region are but two of the players in this year’s production. The survey for spruce beetle in Hurricane Juan damaged areas is continuing. Also, the tick survey is underway and egg masses have been collected for the gypsy moth overwintering survey. The brown spruce longhorn beetle traps will go out soon and the mosquito surveillance will begin in June (see page 6 for more info on these surveys.)

Just in case you missed it, the black flies are out. If they’re not biting in your area, don’t worry they soon will be! And the eastern tent caterpillars are weaving their nests and the larder beetles are knocking at the windows ... Ahh ... spring in Nova Scotia!

In the Insect Focus, I’ve tried to condense the findings and plans for the blackheaded budworm to give you an idea of where it’s been and where it’s going.

And another field season at IPM starts thusly, ‘Til next issue

Jacqui
Jacqui Gordon
Editor

Say What and Quotes . . .

The following definitions are from The Washington Post’s “Style Invitational” that asks readers to take any word from the dictionary, alter it by adding, subtracting, or changing one letter, and supply a new definition . . . Thanks to Eric Leighton for sending these in.

Intaxication - Euphoria at getting a tax refund, which lasts until you realize it was your money to start with.

Reintarnation - Coming back to life as a hillbilly.

Bozone - The substance surrounding stupid people that stops bright ideas from penetrating. The bozone layer, unfortunately, shows little sign of breaking down in the near future.

Giţraffiti - Vandalism spray-painted very, very high.

Sarchasm - The gulf between the author of sarcastic wit and the person who doesn’t get it.

Inoculatţe - To take coffee intravenously when you are running late.

Hipatitis - Terminal coolness.

Doppler Effect - The tendency of stupid ideas to seem smarter when they come at you rapidly.

Caterpalogr - The colour you turn after finding half a grub in the apple you’re eating.

Osteopornosis - A degenerate disease.
**Insect Focus**

Text taken from a presentation given by Walter Fanning, Eric Georgeson, and Bob Guscott, March/April 2005 and a press release issued from Tim Dunne, NSDNR.

Blackheaded Budworm in Nova Scotia - Where it’s been ... Where it’s going ...

_Acleris variana_ (Fern.)

**August 2004**

In the July/August 2004 issue of the Insectary Notes, we printed a “PDO Pest Alert.” This Alert cautioned Pest Detection Officers to be on the lookout for defoliated balsam fir in the Cape Breton Highlands. This was the first response to significant defoliation in the Fielding/Centre/Miners’ Road area. An aerial survey of the defoliation was conducted in August 2004. This survey found areas of low and moderate defoliation (See Figure 1 for actual areas within each classification).

**Overwintering Population**

Although the defoliation could be mapped, there was a need for a procedure to assess the overwintering population: a predictive sampling procedure that would produce results similar to the spruce budworm L2 survey or the hemlock looper egg wash survey. IPM collected samples and tested a technique to wash the eggs from a known amount of foliage. This technique used hot water and agitation to remove the eggs from the needles. The eggs were then counted and the results extrapolated to give an overwintering population. Once the procedure was established, the survey area was expanded to cover the area under attack. With winter closing in around the Highlands, the foliage collections could only continue until the early part of November (See Figure 2 for Overwintering Egg Survey results).

**Press Release - 8 March 2005**

A picture of the overwintering blackheaded budworm population was beginning to appear and it wasn’t looking good. The NS Department of Natural Resources issued the following press release on 8 March 2005.

Nova Scotia forestry officials say there is a serious threat to woodlands in the Cape Breton Highlands where large populations of the blackheaded budworm have been discovered.

Based on an egg survey, Department of Natural Resources staff believe this insect, similar to the better-known spruce budworm, is in the first year of a possible four-year cycle. The budworm feeds on new foliage of balsam fir trees until depleted, when it will then feed on older growth. "This is a serious development in the Cape Breton Highlands' forests," said Eric Georgeson, provincial entomologist. "These are the same forests that have recovered from an outbreak of the spruce budworm more than 20 years ago." Since the devastation in the mid-1970s, the Highlands area has regenerated. Considerable planting and silviculture were conducted in the 1980s. The forest being threatened is a nine- to twelve-metre (30- to 40-feet) high, well-stocked, vigorously growing balsam fir forest. According to results of the egg sampling survey, 114,000 hectares are affected, with almost 40,000 hectares seriously affected. A heavy infestation can completely defoliate trees, may reduce growth, and can cause widespread tree loss.

**Where are we now ...**

The Department of Natural Resources has signed a research and development agreement with the Canadian Forest Service (CFS). Specifically, CFS plans to accomplish the following research goals:

1. develop a monitoring tool to be used as an early-warning system
2. study the insect and its natural predators and diseases
3. study the impact of the defoliation on forest stands
4. as there is no control agent registered for the blackheaded budworm, conduct a spray trial with Btk (a naturally occurring bacteria)
5. use the above research to develop forest management tools for the future.

For More Information ...

The IPM web site has information on the blackheaded budworm.

http://www.gov.ns.ca/natr/protection/ipm/

What's Crawling ...

Flying ...

Biting ... Now

- Larder Beetles (trying to get into houses for food - see page 6)
- Pseudoscorpions (minding their own business - see page 5)
- Eastern Tent Caterpillars (building tents)
- Black Flies (biting)
- Dog ticks (biting)
- Deer ticks (biting)
- the odd Anopheles mosquito

Figure 1. Balsam fir defoliation in the Cape Breton Highlands, August 2004.
Life Lessons ...

- Middle age is when broadness of the mind and narrowness of the waist change places.
- Someone who thinks logically provides a nice contrast to the real world.
- Experience is a wonderful thing. It enables you to recognize a mistake when you make it again.
- Junk is something you’ve kept for years and throw away three weeks before you need it.
- My idea of housework is to sweep the room with a glance.
- Artificial intelligence is no match for natural stupidity.
- There is always one more imbecile than you counted on.
The Provincial Entomologist’s . . . . . . . Notes and News . . . . . NOT!

Due to a very busy schedule, Eric was not able to write his column this issue. I’ve replaced it with something that Eric approves of ... Humour! I will harass him further for next issue. -Editor.

Horrorscopes ...

Aries Mar 21-Apr 19. This is a good week to wear a disguise.

Gemini May 21-June 21. That special item you bought at the garage sale for cheap makes a big change in your life when you’re charged with having passed a counterfeit twenty dollar bill in order to buy it.

Sagittarius Nov 22-Dec 21. Be confident this week in terms of making decisions. They’ll be the wrong ones, of course, but make them with gusto!

Books Never Written - Thankfully!

The Numbers Game by Cal Q. Later

Twenty yards to the Out House by Willie Makit and illustrated by Betty Wont

My Life with Igor by Frank N. Stein

Was Prepared by Justin Case

Waiting in Line for the Bathroom by Ivana Tinkle

Computer Memory by Meg A. Byte

Amelia Earhart’s Guide to the Pacific Ocean

Usages for Plutonium in the Kitchen

And Finally ... Business Signs!

On an Electrician’s truck: "Let us remove your shorts."

Outside a Radiator Repair Shop: "Best place in town to take a leak."

On a Scientist’s door: "Gone Fission"

Bits and Pieces

Ant Hills
Jeff Ogden

Recently, I’ve received calls concerning ants, in particular the inhabitants of the large-mound ant hills often seen in open field and pastures. The makers of these rather large sandy, sometimes grassy, mounds are field or mound-building ants. Some species of mound-building ants can be pests of seedlings and are known to inflict a nasty bite and should be avoided. To control these pests there are a few options.

1. Amending the mineral soil with organics, such as peat moss, manure or compost may discourage the ants from inhabiting the area.
2. Chemical control using a pesticide, such as Diazinon, or Ant and Grub Killer should be applied. To help ensure the elimination of these pests, dig the nest up to get at the bulk of the inhabitants.

Pseudoscorpions
Jacqui Gordon

Quite a few of these little critters have been showing up lately. At first glance, with their threatening pincher-like claws, they remind us of scorpions. Closer examination shows they have no curved upward stinger, so then thoughts turn to ticks!

The good news? (and yes, some insects and their cousins come with good news!) is that pseudoscorpions are harmless to humans and animals. They can, in fact, be considered beneficial because they feed on mites, booklice, and small insects. They usually live outside in mulch, moss or leaf litter, and under stones and tree bark. Why they make their way into some houses and not others is a bit of a mystery, but at least we know now that they aren’t nearly as threatening as they think they are.
Bits and Pieces (contd.)

A Shubie Retirement
(Thanks to Gerald Gloade for the illustrations!)

On 21 April, we at Shubie held a celebration to honour Dan MacDonald’s 31 years with the Department and wish him well in his retirement. Dan has worn many hats with the Department ... and we know the former Lands and Forest green is his favourite. Although Dan has many things to keep him busy (a woodlot to tend, a tractor to work on, a lawnmower collection, and a few other projects lined up), the decision to retire was not one he took lightly. He commented on how much he liked the work he did and how in all the years he worked with DNR/L&F, he’d never missed a paycheck! Dan leaves IPM with an impressive collection of used plastic bags and our best wishes for a long and happy retirement.

“And that’s all I have to say about that.”

Larder Beetles
Jacqui Gordon

Once again the little beetles with the light brown racing stripe across their backs are out and about. The best way to convince these little creatures that there’s no such thing as a free lunch is to take care of all the food sources before they come knocking. Keeping stored food (don’t forget the pet food and bird seed) in containers instead of open bags is a good start. Make sure when spills occur, they are cleaned up quickly and pay close attention to the feeding area for Fido and Fluffy. Little bits of food are all these insects need to stay healthy and happy.

Project Updates

West Nile Virus
Jeff Ogden

Again this season, the Annapolis Valley region will be sampled weekly from June to October for adult mosquitoes. There are 12 sites from Grand Pre to Kingston. Similar to 2004 all Culex mosquitoes will be tested for West Nile Virus. Field work for this project will begin in a few weeks, with some random larval sampling and habitat mapping.

Tick Survey
Jeff Ogden

With the support of Health Canada, work to determine the status of the black-legged or deer tick in the area of Lunenburg, will continue. The province-wide passive tick survey will also continue with the cooperation of DNR staff, local vets, and medical doctors.

Through the field season, I will be conducting biweekly drag sampling to better understand the life cycle of the deer tick and with the guidance of Dr. Robbin Lindsay (Health Canada), small mammal trapping to ascertain the degree of Borrelia infection in mice. Also in the fall, with the assistance of Regional Services, we will be collecting ticks from hunter-killed and road-killed white-tailed deer to determine any geographical spread of the deer tick.

Spruce Beetle Survey
Jeff Ogden

With the support of the Nova Forest Alliance, the second year of this long-term surveillance of the Hurricane Juan impact zone has begun for 2005. Traps were placed at the eighteen sites in mid-April and will be monitored regularly for the presence of spruce beetle until mid-September.

Brown Spruce Longhorn Beetle Trapping Survey
Jeff Ogden

In addition to the flight intercept traps being placed by our PDO’s in mid-May, there will be BSLB intercept traps placed at each of the Spruce Beetle Survey locations (above survey). These subsequent traps will greatly increase our surveillance area for monitoring this forest pest.

Gypsy Moth Egg Mass Search
Kim George

Very few gypsy moth egg masses were found during searches in April. No viable egg masses were collected in Bridgewater and any signs of life forms from last year were very minimal. This is a good indication that the population may have crashed. In 2004, there was a report of a high population of gypsy moth around Caledonia, Queens County with defoliation noted. However, following an egg mass search, nothing was found within the outbreak area. A very minimal number of egg masses were collected on the "fringe" of this outbreak, and they do not appear to be healthy. The collected egg masses are being reared to determine if they are viable.