

Fall has now been with us for a while and despite the warm weather of late, the pollinators have all pretty well died off or gone into their nests for over-wintering. But fear not – they'll be back before you know it!

## Butterflies in Space!

Many people are aware that monarchs can travel great distances, but did you know that they've even travelled OUTSIDE of our planet's atmosphere? On November 16, the space shuttle Atlantis carried 3 six- or seven-day old (4<sup>th</sup> instar) monarch caterpillars, and 4 six-day old painted lady caterpillars to the International Space Station (ISS) in small chambers. Researchers are investigating the effects of micro-gravity on the butterflies' behavior and development, and will be able to compare their results to those butterflies raised here on Earth under almost identical situations (except for the gravity of course!). The two types of butterflies are being studied and followed by different groups: see [http://www.bioedonline.org/space/STS\\_Mission\\_129.cfm](http://www.bioedonline.org/space/STS_Mission_129.cfm) for information on the painted lady project, and [www.monarchwatch.org/space/](http://www.monarchwatch.org/space/) for the monarchs.



*International Space Station, photo from <http://spaceflight.nasa.gov/gallery/images/station/crew-20/html/s127e011210.html>*

Over 600 classrooms in the US are raising monarchs at the same time as this space mission, while others are looking at painted ladies. The painted lady butterflies emerged on December 1, and the monarchs started emerging on December 3. Look back at the old pictures and videos available on these sites and see how the caterpillars have fed, grown, formed chrysalis', and emerged as butterflies!

## Pollinator Conservation in Practice Meeting – Naturium (Greenway Blooming Centre, Breslau)



*Monarch caterpillars and a chrysalis on milkweed leaves.*  
© V. MacPhail

On Friday, November 13, Pollination Canada hosted a meeting about pollinator education and conservation at the Naturium. Representatives from Pollination Guelph, the Universities of Guelph and Waterloo (including the NSERC-CANPOLIN research network), the Grand River and Credit Valley Conservation Authorities, the Toronto Beekeeper's Cooperative, the Royal Botanical Gardens, the City of Guelph, the Guelph and Wellington County Master Gardeners, the Ontario Horticultural Association, Brad Peterson, and the Halton-Peel Woodlands and Wildlife Stewardship group (Ministry of Natural Resources) gathered together to share their organization's programs or interests related to pollination or pollinators. Round table discussions occurred on topics such as public gardens, school programs, monitoring, roadside/rights of ways, parks, pesticides, and public policy. Groups shared educational materials (handouts, websites, etc.) that they currently have, are developing, or feel are needed.

All the participants expressed the importance of networking and felt that this meeting was a great step forward. It was particularly gratifying for four of Pollination Guelph's board members to see the amount of enthusiasm and uptake that has occurred since they held a similar meeting in March 2007 where many of the same groups were unfamiliar with the topic of pollination let alone including it in their programs. Contact information was shared and it is hoped that this meeting will be just one of many more to come.

## Pollination Guelph Updates

- Pollination Guelph made its way into the City of Guelph's 2010 calendar – check out May at [http://guelph.ca/uploads/ET\\_Group/admin/ConservationCalendar/2010\\_Conservation%20Cal.pdf](http://guelph.ca/uploads/ET_Group/admin/ConservationCalendar/2010_Conservation%20Cal.pdf).

## Pollination Guelph Updates – Continued

- A tentative theme and list of potential talks has been developed for our annual pollination symposium, to be held next March in Guelph. More details will be in the next newsletter.
- Planning is well on the way for projects in 2010. In addition to the large-scale planting at the Landfill, we hope to work in other areas where we can get our many volunteers out and busy planting! These areas will be examples of what small-scale pollinator-friendly gardening can look like (e.g. like your front yard). One area will be at the Guelph Centre for Organic Gardening (at the Guelph Arboretum), and others may be at several well houses throughout the City.
- Two small grants were obtained by Dr. Peter Kevan to help support monitoring pollinator populations at the Eastview Landfill in 2009 and 2010. NSERC-CANPOLIN funding provided additional support to complete the monitoring.
- Samples of flower-visiting insects taken this summer at the Landfill are being processed and it is hoped a species list will be available by Spring 2010. The filled trap nests were collected and the occupants will be identified upon their emergence next year.
- The plant inventory at the Landfill was completed, with the majority of the plants found to be non-native. Although uncommon, some very pretty natives were found, including Evening Primrose, Black-Eyed Susan and Common Milkweed. These native plants have shown themselves to be tough and able to grow in harsh conditions, and therefore are great candidates for urban gardens.
- Pollination Guelph gave a panel presentation during the Master Gardener's Zone 4 Technical Update in September. A tour of the Landfill followed the morning presentations, giving the participants an idea of the project scale, current state of the site, and a vision of the completed park.
- The City of Guelph's Healthy Landscape's Garden Tour was quite successful, and included the theme of pollinator-friendly gardening. Pollination Guelph was at the home of Judy Martin, and was able to chat with many members of the public. A highlight of the day was watching a monarch emerge from a chrysalis, spread and dry its wings, and then fly away.



*Here an Agapostemon bee collects pollen from a Black-Eyed Susan. © V. MacPhail*

## Volunteers Wanted for Positions of Volunteer Co-Ordinator and Treasurer



*Malaise trap used to capture flying insects at Eastview Landfill. © A. McGraw-Alcock*

With a number of events being planned for next year, Pollination Guelph is now looking for a volunteer to help with the organization of individuals to help with the planting, maintenance, and/or other projects Pollination Guelph will be involved with. This position would involve responding to e-mail enquiries about volunteer opportunities, maintaining lists of volunteers, and with the Board's assistance, recruiting and co-ordinating volunteers for various events.

As well, our current Treasurer's position ends in February, and so we are looking for a volunteer to accept this two-year term on the Board of Directors. This individual should have experience in accounting and book-keeping. For more information, or to express your interest for either position, please contact a board member or [pollinationguelph@gmail.com](mailto:pollinationguelph@gmail.com).

## Need a Christmas Gift for Someone Who Has Everything? Consider Making a Donation!

Pollination Guelph is able to accept donations and issue charitable receipts (with the assistance of the City of Guelph) and would be happy to send a notice to you, your friend, or relative to let them know a donation has been made in their name. Donations to Pollination Guelph can be made through a board member, in person at Guelph City Hall, or by mail to Pollination Guelph, 144 Country Club Drive, Guelph, ON N1E 3K9. Cheques can be made payable to "Pollination Guelph". Thanks for supporting pollinators!

## How You Can Help

- Share this newsletter with friends, family, and co-workers. The more people interested in and aware of pollination the more success we will have in protecting plants and pollinators.
- Stay tuned – we are making exciting plans for 2010 and beyond!

*Please note that this newsletter is intended for anyone interested in keeping up with the work of the Pollination Guelph board and volunteers. For more information, or to be added to our mailing list, contact [pollinationguelph@gmail.com](mailto:pollinationguelph@gmail.com).*