

Old Saybrook Conservation Circular

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Going Batty

By Glenda Sohl

You may see them in the sky at late dusk, flitting like large moths. What are they? Bats! Ooh! Witches and vampires and ghosts!

No, don't be afraid. They won't fly into you or even into your hair! Bats are nearly blind, but have an excellent other sense for navigating: echolocation. Bats emit a high-pitched sound which is beyond our hearing. The sound bounces off objects and returns to the bat's ears. Because the sound waves are so close together they can signal very fine distinctions. So your head is safe. Connecticut bats are also not vampires. They do not suck blood from humans or from cattle. Vampire bats are found in Latin America.

The most common bats in Connecticut are the small brown bat and the large brown bat, both of

which are insect eaters. Bats are the only major predator of night-flying insects and eliminate mosquitoes more efficiently than bug zappers. One small brown bat can eat 1200 mosquitoes in an hour!

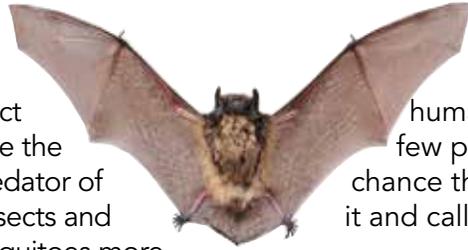
Bats can be pests. They like to roost in dark spaces, such as attics, barns and within hollow walls. One way to discourage this behavior is to give them an alternative, such as a bat house. If you want the mosquito control without having bats in your belfry, give them a home. Connecticut DEEP has plans for two sizes of bat house on their web site.

Bats are also known to carry rabies; however, this fear is overblown. Less than 1 percent carry the virus, and sick bats are unlikely to attack

humans. They also carry very few parasites. But just on the off chance that one bites you, hold onto it and call your doctor immediately.

Why do you mainly see bats in the summer? Do they hibernate? No. Small brown bats actually migrate to caves in the mid-Atlantic region for the winter, then return in the spring. Large brown bats remain all winter, but go into a state of torpor where their hearts slow to as low as 10 beats per minute, considerably slower than their resting state of 600 beats per minute. This state is temperature-dependent, which explains why you may see large brown bats when there's a stretch of warm weather in the winter.

Bats: free mosquito control with very few negatives. Put up a bat house today.



Bat House Party!



On July 17th, members of the Old Saybrook Youth and Family Services met with Members of the Old Saybrook Conservation Commission to construct bat houses and learn about the importance of bats in the environment. Bat house kits were supplied by the Conservation Commission for construction. It was a hot and humid day – with everyone meeting in the gazebo on the Town Green. Wielding hammers and nails, brushes and wood stain, twelve Bat Houses were assembled. Each house built to house 20-50 adult and baby bats.

Later that week, the youth members erected the bat houses in The Preserve off of Ingham Hill Road. Bat populations are decreasing due to habitat destruction and a fungal disease called White-Nose Syndrome that attacks the bats during hibernation. Follow this link for plans to build your own bat house - http://www.eparks.org/wildlife_protection/wildlife_facts/bats/bat_house.asp



Blue Birds and Butterflies

What do Blue Birds and Butterflies have in common? The Old Saybrook Youth and Family Services and the Old Saybrook Conservation Commission! In April, members of the Youth and Family Services met with Richard Esty, Chairman of the Old Saybrook Conservation Commission. At that time, Blue Bird house kits and butterfly house kits were provided. The youth went right to task to assemble the kits and to paint and decorate them. During the assembly, the youths listened to recordings of blue bird songs, and learned their importance to the environment. In addition, they learned about our struggling Monarch Butterfly species and what they and their families can do to help provide food and nursery habitat for the adult and larval stages. The youth were instructed on the best habitats to place the bird and butterfly houses and once completed – off they went to put them up. What an excited group of youth eager to spend time outside in nature!

Plastic – A Modern Day Miracle or a Nightmare?

The invention of plastic has done so much good for us – building world economies, improving industrial and residential packaging and helping to propel humankind into space. So why are there a growing number of scientists wishing us to discontinue the use of plastics? And why is there concern over our current plastics disposal process? There is increasing evidence that supports that some components of plastic may be harmful to humans - accumulating in their bodies to levels that may affect the endocrine and reproductive



systems. Some evidence supports that BPA or bisphenol A – an endocrine disruptor that can be found in many of our food and beverage bottles and as linings to our metal cans is also accumulating in our bodies. This compound, when exposed to heat, acidity, alkalinity or even repeated washings, leaches out into our food. In addition, studies have shown that BPA also leaches into our groundwater from all plastics sitting in our landfills. As an endocrine disruptor, it can cause adverse affects on human development and reproduction. Polycarbonate water bottles pose an even greater risk of BPA, leaching into water at room temperature and if heated, the BPA leaching increases over 55%.

The dangers from plastic are not just from ingestion. During the industrial manufacturing of plastic, all manner

of toxic chemicals are released, many of which are carcinogenic or neurotoxic. These would include vinyl chloride, from PVC; dioxins and benzene, from polystyrene; and formaldehyde from polycarbonates. Many of these toxins are known as POPs, or persistent organic pollutants. They are highly toxic, and like plastic, they don't easily go away and are accumulating in our environment.

Throughout our history, humankind has strived to improve life – to mold the world around us to ensure our success. Unfortunately, the methods that have been used and the conveniences that have been gained come at a price. And science

is now proving that we are paying for this with great detriment to our planet and to ourselves. The challenge posed is: 'How can we reduce or remove the negative environmental impacts of plastics while still benefiting from the convenience that they offer to our society?' Some say that we must stop the manufacture of plastics altogether while others state that we need to develop ways to make plastics cleaner and safer. Still others say we must more effectively and efficiently reuse and recycle our plastics. Maybe it is a bit of all three – a global plan – to make this happen and help ensure our world is a better place. What do you think? We want to know. Send us your thoughts to: christine.nelson@oldsaybrookct.gov.

What is Plastic?

In 1856, Alexander Parkes patented Parkesine – a molecular compound considered to be the first man-made plastic. So exactly what is plastic? The Wikipedia definition of plastic is "a material consisting of any of a wide range of synthetic or semi-synthetic organics that are malleable and can be molded into solid objects of diverse shapes. Plastics are typically organic polymers of high molecular mass, but they often contain other substances. They are usually synthetic, most commonly derived from petrochemicals, but many are partially natural." The invention of plastic revolutionized many industries – and indeed, the very fabric of our modern civilization.

In 1907-1908 the invention of two plastic compounds propelled plastic into everyday living. The first was cellophane – a light and non-reactive compound that revolutionized the packaging industry with its ability to protect product during shipping and handling. It also revolutionized common household storage practices. The second plastic compound was Bakelite – it was light yet durable and provided the basic building blocks for many tens of thousands of items. Because of its' heat resistance – it was very useful in the electronics industry from light sockets to toasters, from the automobile industry to aerospace. Common household items such as the telephone, toys and even jewelry further integrated plastics into our daily lives.

After WWII, compounds such as Teflon, Nylon and even Plexiglas propelled us into even greater use of plastics. Styrofoam was also created during this time. Go into any store or into any house – and it is easy to see how one might consider us to be in the Plastic Age – the modern day equivalent of the Bronze Age or Stone Age.



About 8 million metric tons of plastic are thrown into the ocean annually. Of those, 236,000 tons are micro plastics – tiny pieces of broken-down plastic smaller than your little fingernail.

Conservation Commission Members

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