



**Mark Your Calendar:**

**December 2, 2006 – Field trip to John Heinz National Wildlife Refuge. 8:30am. Lead by Bob Duke.**

**December 11, 2006 – Monthly Meeting. 7:30pm. Members present their own nature stories.**

**December Meeting:**

This is your chance to take center stage! AWS members will present their own nature stories! If you plan on presenting please let Janet know at (856)833-0133 or email [awspublicity@aol.com](mailto:awspublicity@aol.com)

**President's Message**

As we approach the holiday season and the end of the year, it is time to spend time and energy with your loved ones and family, with your hobbies, to catch up on your goals set for 2006, and also to consider those less fortunate. Whether you contribute money, food, material goods or your time to make someone's 'world' better that is what we do as a people and as a club. I wish all of you a very happy and peaceful holiday season.

I'd like to wish Patsy and Don Kirchoffer the best as they leave this area to move closer to their immediate family. We thank Don for his energy at our meetings. He cares about nature, people, and the conservation of the environment. He shared his ideas, knowledge, and passion about conservation and inspired us to know what to do about it. We will miss his presence and remarks at our meetings but hope that he stays in touch with us.

The club lost a longtime member. I remember him sitting in the front row each meeting for as long as I have been a member. Leonard Morgan died November 1st at age 99 after a brief illness. His thirst to learn and curious nature kept him learning and asking questions of each of our speakers. We

send our condolences to his family. We will miss his presence at our meetings.

Pat Brundage  
December 2006

**Field Trip John Heinz National Wildlife Refuge Saturday Dec. 2<sup>nd</sup> 8:30am**

The December 2, 2006 field trip will be to the John Heinz Wildlife Refuge, looking for early wintering and lingering late migrants. We will meet there at 8:30 AM. We will walk the dike and possibly visit the nice visitor's center. Bring the usual; binoculars, scopes, snacks and drinks. Trip lead by Bob Duke.

**Directions to John Heinz National Wildlife Refuge at Tinicum:**

From the Walt Whitman Bridge, take I-95 South to Exit 14 (Bartram Ave.). At the 5th light, make a RIGHT onto 84th St. Then at the 2nd light on Bartram, make a LEFT onto Lindbergh Blvd. The entrance is on the right side of the road, just past the first STOP sign.

**\*Note field trip reports are now posted on our website.** visit <http://www.audubonwildlifesociety.org> for a listing of species sighted.



*Atlantic County Park led by Lloyd Shaw.  
Many birds were seen.*

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Please send news items to Janet Goehner-Jacobs at [awspublicity@aol.com](mailto:awspublicity@aol.com)

<http://www.audubonwildlifesociety.org>

### **Invasive Earthworms Threaten NJ Ecosystems**

Most people don't consider the earthworm as a threat to New Jersey's ecosystems, but this little studied organism is starting to get attention as some consider it the biggest threat to our hardwood forests. New Jersey has no native earthworms - they died off during the last glacial period across the region - hence our forests developed without them.

The first earthworms probably arrived in our region with ships traveling from Europe which used rocks and soil as ballast which then was dumped ashore when no longer needed. Recently, as fishing has become more and more popular as a hobby, the use of non-native worms for bait has spread them to all corners of the state. Common bait worms include those sold as "night crawlers," and "angle worms."

Gardening compost kits are another big reason earthworms are entering our hardwood forests. Earthworms do consume decomposing plant litter and break down and loosen the soil hence benefiting gardens. But woodlands suffer when the chemical and biological structure of the forest floor is changed. Without worms, fallen leaves decompose slowly, creating a spongy layer of organic "duff." Most of our native hardwood forest tree seedlings, wildflowers, and ferns grow best in these conditions. This duff also provides habitat for ground-dwelling animals and helps prevent soil erosion. Invading earthworms eat the leaves that create the duff layer and are capable of eliminating it completely. Big trees survive, but many young seedlings perish, along with many ferns and wildflowers. In areas heavily infested by earthworms, soil erosion and leaching of nutrients may also reduce the productivity of forests.

Without humans moving them around, earthworms move slowly, less than a half mile over 100 years. Even in areas with earthworms already present, we can help prevent any new alien species from entering our soils and possibly creating even more of an ecological problem by being careful with any earthworms we use - making sure they don't escape into the soil. Compost should be frozen for at least a week before being used as an example.



*Invasive earthworms, such as Nightcrawlers are pervasive.*

I used these web sites for most of my information.

This link, <http://www.dnr.state.mn.us/invasives/terrestrialanimal/s/earthworms/index.html> is on Minnesota but the details on how worms effect the soil is the same everywhere.

This site, <http://www.njaudubon.org/Conservation/PDF/Symposium.pdf> has info especially on New Jersey and some other invasive species not just earthworms.

This site, [http://www.ecostudies.org/people\\_sci\\_groffman\\_earthworms\\_summary.html](http://www.ecostudies.org/people_sci_groffman_earthworms_summary.html) is highly technical, but well worth the read for learning more on why earthworms change the soil composition.

This site, <http://partners.nytimes.com/library/national/science/082900sci-animal-worm.html> is an article by the NY times science section.

And finally, the article on this link: <http://www.eap.mcgill.ca/MagRack/SF/Fall%2092%20M.htm> is actually promoting the use of earthworms for agricultural efforts. I don't agree and have included it here just so all will know that earthworms are still considered very beneficial and many are being encouraged to use them more and more. The long term consequences are not being discussed here.

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### **Suburban Serengeti**

It's morning in National Corporate Park and already traffic is stacked up in both directions. A large herd of Wildegeese is crossing the road, moving from a waterhole where they spent the night to fresh grazing. Stately and arrogant they move slowly, many stopping to tear at the grass in the median. Menacing sounds emanate from the open, pink mouths of the older animals. The young of the year are skittish and crowd together. Not yet in full regalia, they look like rough sketches of their parents. Drivers open their windows to better view this dependable display of wildness.

The Wildegeese graze all day on the Corporate Plains, fertilizing them with their droppings. As the sun goes down they move to the waterholes and are replaced by the White-tailed Deeralopes who move cautiously from the forest interior, tails flicking conspicuously. They're joined by Cotton-tailed Merebunnies and the furtive Rhinocepussees, small wild cats that prey on the Merebunnies and the many exotic birds that inhabit the forest and patrol the Plains for earthworms. Night signals the roosting of the soaring hawks and the advent of the owls. The not-so-dark is occasionally pierced by the cries of Red or Gray Foxenas and even roaming packs of skulking Jackalotes.

In the Ohmyohmy Gorge, excavations have uncovered relics of Early Corporate Man (*homo suitandtieus*) whose modern form occupies the strange metal, stone and glass structures that dot the Corporate Plain. In fact, archeologists hypothesize that the existence of the Plain itself can be traced to the emergence of Corporate Man who transformed the forest to a habitat more suitable to his needs, creating large expanses of soothing green grass broken only by his structures and stone surfaces to support his primitive vehicles. Corporate Man then devised artificial grazing machines to keep his greensward in check instead of relying on Wildegeese, Deeralopes and Merebunnies for whom he had unwittingly created the ideal habitat. Indeed, environmental studies have concluded that *Homo suitandtieus* has attained complete dominance over the Plains, surpassing even the Wildegeese in impact. The alarming proliferation of these two species has caused different groups to advocate the culling of both. The dark and silent vultures, rocking on their wings above the Plains, await the outcome with indifference.

John Maret  
December, 2006

### **The Rut**

I took a walk in the woods behind my office. The air was damp and rich with the smell of decaying leaves. I heard a commotion to my right and two does appeared, coming to a halt when they saw me. I froze and they craned their necks, moving their heads up, down and sideways, trying to get a scent, figure me out. As I stared I noticed several others deeper among the trees. All began to move away, cautiously at first, then faster. It wasn't hunters or a pack of wild dogs that had these animals on the run. Love had gotten them moving and its manifestation now materialized a good-looking, four-point buck. He emerged from thick cover, lowering his head to get under a branch as the does fanned out in front of him. Had a road intervened drivers would have been dodging eight or nine deer. As I continued along the semi-circular path the does shifted back towards the brushy edge of the woods where I'd first seen them, moving quickly but not as if from danger. While I watched them convene and quietly disappear into the dense bushes the buck crossed the path behind me, loping along in plain view, stopping a couple of times to pose and show his best profile. The spectacle had the air of a massive flirtation, something you might see at a middle school dance. He, too, dissolved into the undergrowth but by the time I'd gone another 75 yards he was back in the open retracing his steps to the path. He trotted down it for a way only to return and cover the same ground once more, using a gait that made him look more like a dressage horse than a wild animal. I don't know if the hidden does were impressed or laughing among themselves but had I been a hunter, this love-sick fool, so hard to find out of mating season, would have been an easy trophy.

John Maret  
December, 2006

### **Other Clubs Events:**

**Burlington County Natural Sciences Club**, BCNSC presents, "Celebrating the Pinelands" Sugar Sand Ramblers. Dec. 13, 2006. BCNSC Meets the second Wednesday of the month, September through May at 7:45pm in Lumberton Leas Meeting Room, Lumberton, NJ. For more information on BCNSC go visit: <http://oldsquaw.tripod.com/index.html>

### **Nature Programs on TV:**

#### **Nature: Christmas in Yellowstone**

Airs on WHYY Sunday, November 19 at 8:00pm.  
<http://www.pbs.org/wnet/nature/preview.html>