October is that “scary” month when people decorate with ghosts, witches, spider webs and bats. But bats are valuable assets to the environment and should not be feared at all. Our New Jersey bats as night flying mammals can consume up to 3,000 insects in a single night. Some of these insects are pest species including mosquitoes. They perform this feat through echo-location by emitting several ultrasonic pulses per second into the air that bounce off surrounding objects and prey and are received by their ears. Their erratic flight is calculated and deliberate.

There are many “untruths” about bats. Bats are not blind. Bats do not entangle themselves in hair. Fewer than one half of one percent of wild bats species have rabies. Vampire bats live in tropical areas and feed on cattle and poultry.

New Jersey has 9 species of bats – six of these are residents, hibernating in caves and abandoned mines in winter - the Little brown bat, Big brown bat, Northern long-eared bat (Federally threatened), Eastern small-footed bat, Tricolored bat, and the Indiana bat (NJ and Federally endangered). Three species are migratory – Hoary bat, Red bat and the Silver-haired bat. They can be found overwintering in southern states.

During summer months when bats are active, they can roost in the day in trees or tree cavities or underneath strips of bark or man-made structures. By the end of October, the six resident species face a difficult winter. Their bodies undergo reduced metabolism (torpor) where fat reserves are burned very slowly. A very serious fungus disease of bats called WHITE NOSE SYNDROME was discovered in 2006 in a cave near Albany, NY. Infected bats show white fungus growth on their muzzles and wings, often causing holes in their wings. They awaken more frequently using fat reserves, become dehydrated and cannot survive til spring. This disease has spread by contact to bats in 31 states and into Canada. Over 6 million bats have died. The population of N. long-eared bat has been reduced 98%. (continued)
The Little brown bat and the Eastern small-footed bat are being considered for the Federal endangered species list.

WHAT CAN YOU DO?
Keep informed about issues.
Support White nosed syndrome research
Donate to wildlife conservation groups in NJ.

Adopt a species through Conserve Wildlife Foundation of NJ (Indiana bat, Bog turtle, Bobcat and many more).
Build a bat house if you have a sunny spot.
For more of what you can do, check out - www.fws.gov/northeast/nifieldoffice/youcan.html

PLASTIC POLLUTION

- 8 million tons of plastic waste enters the world’s oceans every year. If this continues trash will outweigh fish by 2050
- All of the plastic ever produced is still in the environment
- Once manufactured it only changes form
  - A small amount is marketed as post-consumer recycled material
- Most enters the environment – mostly the oceans - as waste
- Some plastics break down into small particles and bio accumulates into our food and water
- Plastic facts; Americans use half a billion (500,000,000) plastic straws per day
  - Annual use of straws is estimated to be 3 million pounds
  - If 30% of waste is recycled in the USA then 2.1 million pounds of plastic waste in straws alone
  - The USA contains 5% of the world’s population and produces 30% of the world’s waste

WHAT CAN WE DO?

- **Personal Commitment** – When dining out please politely request “No straws please” at the start of each meal.
- **Community Initiatives** – Encourage your family, neighbors and friends to support “no straws and no plastics initiatives”.
- Use compostable bags and cups