



The Bird Store  
and more...



## Great Swarming Honey Bees!



Yikes! It happened again this spring. There were a lot of honey bees in our observation hive, and then there were next to none! The bees had swarmed and were all in a large pile on the outside of the bird store.

So what do you do when your hive of bees is now on the outside instead of the inside? We called the bee keeper who takes care of the hive. Mike came with bee boxes and a bee suit, found the queen in the pile of bees and put her in the new bee box. Over the next few hours some of the bees returned to the observation hive inside the bird store and others followed the queen into the new box.



After dark Mike came to pick up the box and we were left with some bees in the observation hive, six queen cells, and a bunch of drone cells. About 1 week later another group of the remaining bees swarmed again. Watching the honey bees establishing a new queen has been quite an educational experience. We wanted to know more about why the bees swarmed and here's what we found out.



As the days get longer and the temperature starts to rise, honey bee activity increases as they prepare for spring. The bees are beginning to build up their populations in order to have enough worker bees to gather the nectar. As the honey bee population in a hive builds it may increase its numbers too quickly and the hive becomes overcrowded. This overcrowding can stimulate a phenomenon called "swarming". In a prime swarm about 60% of the worker bees leave the original hive with the old queen. Secondary afterswarms may also happen, they are smaller and are accompanied by one or more of the virgin queens.

Swarming is how honey bees create new colonies. It is said that watching honey bees fly out of the bee hive by the thousands and swirl in the air like a tornado while sounding like a freight train



is one of nature's most awesome sights. We absolutely agree!

Prior to the swarm the worker bees create queen cups. The queen then lays eggs into the queen cups. New queens are raised and the hive may swarm as soon as the queen cells are capped and before the new queens emerge from their queen cells. A laying queen is too heavy to fly long distances so the worker bees will stop feeding the queen before the anticipated swarm date

and the queen will stop laying eggs. During the swarm preparations scout bees may already scout out possible new nest sites. Once the swarm is ready to go on the planned day they will swarm between 10:00am and 3:00pm as that time of day offers the maximum sunlight hours.



When the honey bee swarm emerges from the hive they do not fly far. They will gather a short distance away from the hive and cluster around the queen. They send 20 – 50 scout bees out to find a

suitable location for a new nest. The scout bees are the most experienced foragers in the cluster. Each scout promotes the location they have found. If a scout can convince the other scouts to see a particular location they may take off to check out the proposed site and promote it on their return. Several different sites may be promoted at first. After several hours or sometimes longer a favorite location emerges from this process. When all the scouts agree on a final location the whole cluster takes off and flies to it. In our case, the bees and queen were gathered into a new bee box to form the new colony. Those bees have prospered and are doing well in their new environment.





## Because You Asked!

**Q: why aren't the toad's around my house singing this year?**



Breeding season for toads occurs in the months of March or April, but may extend into July. It usually triggered by warming temperatures and longer days. Considering that June and July were cooler and rainy this year it may have had an effect on the toad behavior.

American toads have one of the most notable calls of all toads. They give off long trill sounds that each last between 4 and 20 seconds. American toads use this call as a way to attract females for breeding. Their calls become frantic, loud, and constant during mating season. Many young males continue to call late into the summer. When they call, their throats puff out like large, inflatable balloons.

Toads breed at temporary sights that often vary in location due to the vagaries of rainfall. Because of this they require a long distance communication system. With their loud voices they can hear one another over long distances. This is probably why we hear them so well. The basic function of the "voice" is to bring the sexes together for mating, and it is the males that are "advertising" The males produce a distinctive call that identifies their species and location and may also serve to establish its territory as well as attract a female. Males tend to gather together to broadcast their advertisement calls. Females may choose their mates by assessing the males' breeding calls as well as the quality of the defended breeding territory.

However, there is another even more deadly reason that you may not be hearing the frogs and toads, after doing a bit of research we found an article that states "The northern leopard frogs that inhabit the boreal U.S. have never recovered from some catastrophic population declines in the 1970s. Some blame it on the acidifying lakes and streams caused by coal-burning, others point to the ongoing loss of wetlands to development, and now new evidence shows that the herbicide atrazine—widely sprayed on crop fields throughout the region—is killing the frogs by helping parasitic worms that feast on them".

"Atrazine provides a double whammy to frogs: It increases both amphibian exposure and susceptibility," says biologist Jason Rohr of the University of South Florida in Tampa, who tested the impact by re-creating field conditions in 300-gallon (1,135-liter) tanks in his lab. "Atrazine is one of the more mobile and persistent pesticides being widely applied. In fact, residues have been found in remote, nonagricultural areas, such as the poles."

That may explain why amphibians are on the decline worldwide. As many as one third of the nearly 6,000 known amphibian species—frogs, toads, salamanders, even wormlike caecilians—are threatened with extinction, according to the International Union for Conservation of Nature (IUCN). Amphibians are also falling prey to a devastating disease, believed to be exacerbated by climate change: chytrid fungus. The frog killing chytrid fungus, *Batrachochytrium dendrobatidis*, infects the skin of susceptible amphibians and rapidly kills them. Not identified until 1998, the waterborne pathogen has already been fingered in the extinction of more than 150 species. It is known to have penetrated remote locales, national parks and protected preserves, and is taking a heavy toll on frogs on nearly every continent. This pathogen is marching though Central America at present, leaving silent

streams—those without the chorus of dozens of frog species—behind. Researchers at the University of Georgia in Athens have surveyed such streams before, during and after such extinctions, and documented the impacts in those waters that have lost all of their amphibians, including muddier waters and a less productive food web.

"There are a whole lot of things that aren't being eaten, mostly insects," says biologist Joseph Mendelson of Zoo Atlanta. "And there are a whole lot of other creatures that don't have prey."

But the really bad news is that amphibians may be just the first sign of other species in trouble. Biologists at the University of California, San Diego, have shown that amphibians are the first to respond to environmental changes, thanks to their sensitivity to both air and water. What goes for amphibians may soon be true of other classes of animal, including mammals." To see the complete article go to [www.scientificamerican.com/article.cfm?id=world-without-frogs](http://www.scientificamerican.com/article.cfm?id=world-without-frogs)

Amphibian populations are declining in our area also and that may be why we are missing our nighttime chorus.

Here's an interesting toad fact for you: Adult American toads eat a wide variety of insects and other invertebrates, including snails, beetles, slugs, and earthworms. Unlike most toads, who wait for prey to come along and pounce on it, American toads can shoot out their sticky tongues to catch prey. They also may use their front legs in order to eat larger food. They grasp their food and push it into their mouths. One American toad can eat up to 1,000 insects every day. Great bug control!!! They can eat the slugs in my yard any day!





## Reminders

- ▶ **October 12**  
Columbus Day
- ▶ **October 29 - November 1**  
Seed Sale  
(you must preorder for the sale)
- ▶ **October 31**  
Happy Halloween!
- ▶ **November 1**  
Daylight Savings Time ends  
"fall back" 1 hour
- ▶ **November 11**  
Veterans Day
- ▶ **November 26**  
Thanksgiving Day  
The Bird Store is Closed Today
- ▶ **December 21**  
Winter Begins  
The shortest day of the year!
- ▶ **December 24**  
Christmas Eve  
The Bird Store Closes Early Today
- ▶ **December 25**  
HO! HO! HO! Merry Christmas!  
The Bird Store is Closed Today
- ▶ **December 26**  
Day after Christmas  
The Bird Store is Closed Today
- ▶ **January 1, 2010**  
Happy New Year!  
The Bird Store is Closed Today

## 'Twas The Night Before Christmas... Can you believe its almost here!

'Twas the night before Christmas and all through the house, not a creature was stirring, not even the mouse.

And what to their wondering eyes should appear, but a miniature sleigh, and eight tiny reindeer.

The stockings were hung by the chimney with care, in hopes that The Bird Store gifts soon would be there.

There was no doubt, and nothing to fear, St Nick brought Bird Seed and Feeders this year!

Then in the distance there arose such a clatter, that the birds and squirrels came to see what's the matter.

When you're looking for that special gift for the nature lover in your life, whether it's for the birds, the squirrels, or even Rudolph you'll find it here!



A new pair of binoculars

Bird feeders

Heated birdbaths

Bird Books

Puzzles, Bird socks,

Butterfly Pavilion

Coffee mugs, Travel mugs, and kitchen items, Flags  
Maybe a gift certificate to help with the bird seed budget!



When you're looking for that truly unique stocking stuffer this year you'll find it at the Bird Store And More!!!!

"If you have men who will exclude any of God's creatures from the shelter of compassion and pity, you will have men who will deal likewise with their fellow men"

-St Francis of Assisi

## Pet Memorial Stones

Remembering.....

Custom engraved pet memorials. You choose the stone and we'll make you a memory...  
Each stone has its own unique characteristics

A simple, affordable, lasting tribute to your special friend...  
Handcrafted by The Bird Store and More

Small Stones \$39.99, Medium Stones \$49.99

Large Stones please ask for quote

Your own stone \$49.99 (must be a smooth stone that we can work with)

See our website for more samples.





## Nancy's Notes



It will soon be time for those heated birdbaths to go out, make sure your heater or heated bath is running properly before the cold weather!

Don't forget to take in your hummingbird

feeder. Frozen nectar means a cracked feeder next spring!



Now is a good time to give those feeders a good scrubbing, and repair or replace worn parts.

Remember to clean your bird houses out. Taking old

nests out of the houses will help preserve the house as old nests can get wet and rot the box.

*Enjoy! Nancy*

## Fall Bird Migration



Fall is the time of the year when many birds are busy preparing for the long journey to their winter homes. Migration is the movement of

birds and other animals from one home to another. Some birds will fly thousands of miles to reach their winter homes. As of this publication many bird species have already moved south to their winter ranges. Birds that have nested farther south will have arrived first and bred earlier, so they'll be the first to go then we will see waves of migrants passing through from further north.

Birds begin the journey to their winter homes before the food supply in the north runs out. Day length and temperature plays a part in triggering the birds' internal seasonal clocks. Shorter and cooler days mean that the food supply is running out. When the water in ponds and lakes begin to freeze over, waterfowl cannot get at food easily and it is time to fly south

where it is warmer and open water and food can be found.

Birds tend to wait for good weather and

wind that blows in the right direction, then many individuals will depart at once, arriving at their next stop in a wave. When you notice there are many birds about, there are likely to be migrants among them that you don't see at other times of the year

Many bird species migrate at night, and spend days feeding and resting. This is why you may see a few birds one day and then many birds the next day.

If the birds have had bad weather to contend with or have traveled a long distance they are likely to stay around for a few day, replacing lost fat stores and waiting for the right weather conditions to move on again. Keep an eye on bird feeders, berry bushes, and other places where birds feed. You may see something unusual.

## Sturbridge Christmas Bird Count



Once again we will be participating in the Sturbridge Christmas Bird Count on Monday December 14, 2009.

This count has been going on through out the country for over 100 years. Each year over 40 birders count the species and number of birds in designated sections of the count circle. The group comes to The Bird Store at 5:00pm to compile the list. Anyone who is interested in attending the compilation is welcome to join us.



## How I Learned My Song



Have you ever wondered how a bird learns to sing? Much like human babies, young songbirds babble and mimic their parents' sounds before they develop the vocal skills to "sing their songs."

The relation between the birds' development and human development lies in the brain. Studies suggest that in both cases one part of the brain tries to learn and make adjustments and, once learned, the other part stores the information. The birds, for instance, will adjust their pitch continuously until it mimics the father's song; the brain then stores each adjustment in what scientists call the motor pathway. The accumulation of these adjustments is what enables the nestlings to



develop the ability to sing the song accurately each time, just as their fathers sing it. Practice is the key, as these adjustments are made by trial and error.

Other studies have also shown that sleep plays a very important role in developing these skills in birds as well as humans.

# Bald and Beautiful

Have you noticed any bald headed birds at your feeders lately? We've had Blue Jays at the Bird Store, and I've had a Cardinal at my house. These two species happen to be the birds most commonly affected by this bald headedness. The question is.....Why?



There seem to be a few different theories. Some experts believe that it is an abnormal molt. Instead of losing a feather or two at a time, these birds lose all of their head feathers at the same time, but why only their heads. Why don't they lose their tail feathers, or their primaries?

Others say that it could be a nutritional deficiency. Again, I wonder why only the feathers on the head. It has also been noted that these birds, otherwise, appear perfectly healthy. So, to me, this seems an unlikely cause.

The third scenario is the one that seems the most likely cause. That is, that these birds have been affected by feather mites or lice. Once again, why only their heads? This question actually has an answer in this case. Birds can preen all other parts of their bodies, but are unable to reach their heads. What other

option do they have but to scratch at their heads to relieve the annoyance, hence removing their head feathers?

I do still have one question that I've not been able to find an answer to. Why do the mites only cause a couple species to go bald? Why not chickadees, or goldfinches? Is it a different kind of mite that attacks blue jays and cardinals? Do the other species of birds preen one another more readily, hence ridding each other of these mites?

Whatever the cause, don't be alarmed. It has been noted that these birds eventually obtain a whole new head of beautiful feathers, without any adverse affects.

**Brenda**



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## A New View

If you're wondering what is happening around Sturbridge check out the Merchants of Sturbridge web site. [www.merchantsofsturbridge.com](http://www.merchantsofsturbridge.com) You will find lots of information and a calendar of events. Let's bring back our local economy by visiting the Merchants of Sturbridge.

FREE DELIVERY within 10 miles!



**Bird Store Hours:**  
10:00-6:00 Monday - Saturday  
11:00-5:00 Sunday

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