

# **Swan Information and Care**

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# **Background**

The Lakes of Old Peachtree "LOOP" has mute swans, considered by many to be the most beautiful of the swans. As their name implies they are among the quietest of the swans. We have two varieties of Mute swans English Mute swans that have black legs, red-orange bills and have gray cygnets and Polish (Eurasian) Mute swans that have gray legs, a bright orange bill and produce white cygnets. *Our swans were introduced* to the Lakes of Old Peachtree lakes in April, 2003 after reading that swans were an effective way to manage the Canada Geese population. The plan is to hopefully raise several families of swans and at some point sell extra swans to "recoup" the original investment. Swans are extremely territorial after they have mated, especially toward Canada Geese (not "Canadian" Geese). An "established" pair of 3-year old swans was purchase with monies collected from volunteer donations of \$50-100. The pair Rhett and Scarlett and placed on Lake 3 (Tara Lake) on March 23, 2003. This proved to be very successful and two more pairs (this time 2-year old mated pairs) were purchased for the other two lakes. The four swans were picked up from Tennessee in April 2993 by a LOOP resident (to save \$400 of shipping). A pair was placed on each of the remaining two lakes. These four swans tended to walk between the lakes and stay together. After several months we were able to get a pair to stay on each lake. Then Lake 1 swans were named Cleopatra and Anthony, by the residents that picked them up, and the pair on Lake 2 (Lake Vista) were named Mickey and Minnie (M&M) through a LOOP raffle.

At the LOOP we have seen the swan population as high as 16 with 3 pairs of adults in 2007 to a current low of 6 swans with one mated pair. The decline in the population has been steady and we were not able to get clear answers to the reason. Theories include, swans dying from lead poisoning, dog and fox attacks, being stolen, catching human deceases, dying from improper feeding (mold on food not immediately eaten) and natural instincts been suppressed because of over feeding. Unable to get definitive plans and answers to the decrease in the swan population the LOOP had to make committee changes in 2009

The decision to introduce swans into a lake should not be taken lightly. Although swans are almost self-sufficient, they are the Associations responsibility because they cannot fly away if the area is not suitable. After more than eight years of experience with more that two dozen swans births, here are the things to keep in mind. 1) Swans will only discourage Canada Geese if they are a mated pair and are territorial. This means one cannot over-feed the swans so they do not swim the entire lake. 2) The swans need to be managed by a reliable, knowledgeable person or committee. Their duties will include monitoring, catching, rescuing, supplemental feeding, developing a program that includes monitoring, pinioning,

tagging and tracking the population. 3) The swans cannot become pets or treated as pets (ie. fed excessively and become too familiar with humans. This makes them susceptible to attack, decease, weakens their natural instincts, and above all, ridicule from other swans. Finally, 4) Always have a veterinary that is willing to help you. Many vets do not handle birds and especially large birds. Birds can be injured and even killed if a vet is not familiar with special feeding techniques etc.

We currently (November 2011) we have only one set of mated swans located in Lake two with two cygnets and a pair of swans on Lake 3 (one male and one unknown). If you would like to see more detailed information please see the document "Swan LOOP History" authored also by Simon Robson.

### Life span and habits

Swans typically live for 20-25 years. They usually mate for life but if a mate dies the partner has been know to select another partner. Swans nest in the spring and cygnets are born about 32 days after mating. Cygnets often ride on the back of the female. The cygnets start getting feathers in the early fall and try to start flying (although ours cannot because they have been pinioned). Migrating swans will fly to the same wintering grounds (the south) each fall. The family will continue to stay together throughout the winter. In the spring, migrating swans return to the summer grounds. Again the mated pair will raise another brood. The young could stay with the family for up to 4 years before venturing off to find a mate and start a family for themselves. Although we have seen our swans "evict" their adolescent swans out of the lake before the next nesting season. It is common to hear of 2 and 3-year old mated pairs.

**The male (pen) is very territorial** and will constantly assess his territory and chase away any unwelcome guests (Canada geese). This is the main reason the LOOP invested in the swans. Swans seem to be pretty tolerant of other aquatic birds (ducks, egrets and herons) unless they get too close during feedings.

#### Size and Identification

Swans are the largest of the flying birds. On land they stand over 4 feet tall. An adult male swan weight ranges from 9-18 kg (20-40 lbs.) with the females ranging from 9-12Kg (20-27lbs.) Male wingspan is 208-238 cm (6½ to over 8 feet). The black "knob" (called a caruncle on the top of the beak and the thicker neck are also a good indication, males are also larger than females. If together, they are fairly easy to identify. If you have only one, or the group is young, identification is much harder. A cloacal exam can be done but is had to determine even for the trained veterinarian. A blood (DNA) tests is the only way to be sure. DDC veterinary in Fairfield, Ohio (800-625-0874) contact@vetdnacenter.com has a simple process to collect a blood sample from a nail clipping and send via mail. The process only takes a few days and cost \$19/bird. The birds must be positively identified when the sample is take so the sample can be matched with a swan. Aviary tags can be purchased, or different colored "Zip ties" can be used. Install the zip tie loosely around the leg and cut off excess length. With a few colors of zip ties (6 or so), one can have many combinations (20+) of one or two tag colors, and or different legs locations.

Both male and female swans reach sexual maturity is 2-3 years, females being closer to 3 years. Males even though sexually mature at 2 years old, usually don't mate until 3.

#### Habitat

Swans like fresh-water sheltered lakes. The lakes must be "clean and healthy" to support their food and nesting habits. They will spend most of their time in the water swimming around, protecting their territory and foraging for food. They will come ashore and sit in the sun or shade depending on their mood. Swans will roam from lake to lake as seen between Lakes 1 and 2. This is a very vulnerable time for our swans because they can not fly for more than a few feet above the ground for 20-30 yards. It is very important that dogs are not allowed to chase the swans under any circumstances. For this same reason we would like all swan feeding to be done "lake-side."

# Roaming

Roaming usually occurs for two basic groups of reasons. One is bad and one is good. The first group of negative reasons is that there is something undesirable in the current location (size, noise, harassment, pollution, lack on food, and even an undesirable mate.) Swans will start to roam to find a more desirable place to live. The second group of positive reasons includes the larger family "out-growing" their habitat. The family group will explore neighboring areas and on occasion fight for the new area with existing swans. In 2006 the family (of 7) on Lake 2 has roamed onto Lake 1 and in September of 2005 we had to move the lone swan to the much larger Tara Lake (3.)

### Feeding

Our Mute swan population should be self sustaining by foraging around the perimeter of the lakes for insects, seeds and water plants. The "swan committee" monitors the health of the swans to see if they are getting enough food. If you would like to feed the swans occasionally feel free to feed them bread and bland crackers. **Do not feed them moldy bread** and don't leave food on the bank as it could spoil and/or mold which can fatal to the swans. This could have contributed to the death of a swan on Lake 2 in February of 2012. **Finally, do not feed them pet food, cake or cookies**. Swans should be fed only in the lake. This keeps the swans close to the safety of water and allows them to wash down the food. **The best way to feed the swans is to throw the food into shallow water where the swans can reach the bottom.** This allows them to feed with the help of water and if the food is not eaten the fish will consume. Never "hand feed" the swans. This will get the swans too familiar with humans and allow them to be captured, or hurt. Also please don't feed them if you have a cold or other infectious disease.

If you would like to feed the swans on a routine or semi-routine basis, we would love for you to help us out. But in doing this there are some additional cautions. First and foremost is that we DO NOT want the swans to be dependent on routine feedings. This takes away their foraging skills, makes them less territorial, and lessens their survival skills. This is a very real problem and has happened in the past, and we have lost 75% of our population. To avoid over feeding the Swan committee monitors and regulates all "routine" feeding.

Numerous residents at each lake feed the swans on a regular basis. We try to monitor the feeding of the swans, so please call the Swan Chairperson to coordinate the feeding. Feeding should be done to "supplement" their natural grazing, not substitute it. Feeding too much makes the swans reliant on resident feeding, gets them too familiar with humans and lessens their skills to be self-sufficient.

If you would like to make a feeder so you can drop food in it for the swans here are some basic guidelines.

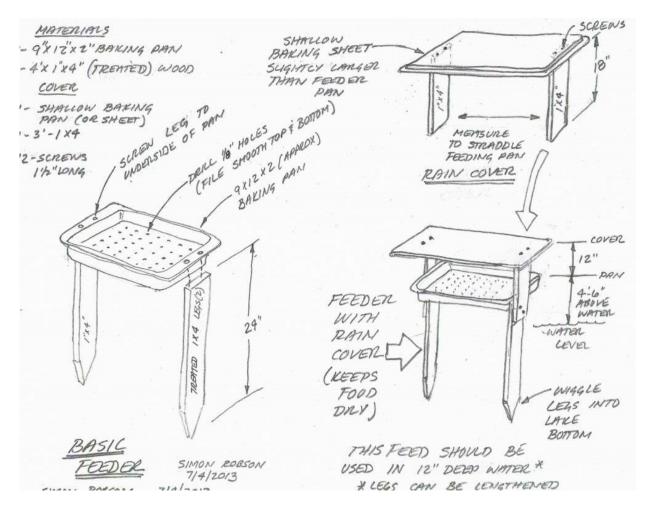
The feeder can be **any container but it must drain well**. The feeder should be positioned about 6" off the water. I've used screens and mesh and seen sections of gutter, wooden trays and plastic containers used. The best thing I have found is an 8" X8" square cake pan. I drilled dozens of 1/8: drain holes in it all over the bottom. Remove any sharp edges or burs with a file or hammer. I mounted the pan in a frame that I hung it from my sea wall, but you can attach 2, 3 or 4 legs. The last one I made used two 1X4's and mounted the pan on the top of the legs with screws through the cake pan lip. I pointed the bottom end to push it into the lake bottom. My legs were about 2 feet long, so it went into the lake bottom about 18". Use a stepping stone to stand on half way between the feeder and the shore.

Coordinated Feeding- The most effective method of coordinating feeding is to assign feeding day(s) to residents wanting to feed the swans. Lake 2 divides up the feeding between 3 residents that feed either one or two days a week. No resident feeds on consecutive days in case they leave on vacation. There are basically two different feeding seasons for our swans. During the summer are the less critical feeding times because the swans can forage for themselves and then in the winter, when foraging is more limited it is more important for the residents to provide food. *We feed the swans* "3-grain Scratch" or "cracked corn" in the summer and the more nutritious "Layer Pellets" (high protein feed to provide energy and encourage reproduction) in the winter. Check the prices corm is expensive now and is the least nutritious. (The most nutritious is Layer Pellets, followed by 3 grain scratch and then cracked corn). If you chose to feed on a regular basis *go down to* the local "Feed Store." (Brownlee's on Hurricane Shoals, just east of Buford Hwy is a close one, or a much cheaper alternative Tractor Supply Company) there are also feed stores in Buford and Dacula.) and pick up a 50 pound bag of food that will cost around \$8 (for scratch)-\$15 (Layer pellets) a bag. If the feeding is a financial hardship the Board will reimburse residents under the following rules adopted on November 29, 2010 and revised on July 11, 2011:

- Swan food purchases must be approved by the Swan Chairperson (or Board) PRIOR to purchasing. This allows the Chairperson to monitor the type and quantity of the food being purchased.
- 2) Swan food will be reimbursed with a receipt.
- 3) Because different food is needed during the winter, swan food will be reimbursed as follows:
  - a. At the price of "layer" food (pellets) during the winter, and scratch or cracked corn during the summer.
  - b. Newborn (brooder) food will not be reimbursed. Use "layer" food for cygnets.
- 4) A reimbursement rate of 50# every guarter is considered standard.
- 5) These rules apply for entire households (not individuals).
- 6) Reimbursement will be at the receipt amount up to a maximum (excluding tax) of :
  - a. Layer (crumble or pellets) \$13.00 per 50# bag.
  - b. 3 Grain scratch \$10.00 per 50# bag
  - c. Cracked Corn \$9.00 per 50# bag

**Feeding on a regular basis** should be done using one of the following techniques. If the swans are present you can pour the feed right in the water in a swallow section. The swans will "vacuum" the food off the bottom, so the best way to feed if they are in the immediate area is to drop/throw the food into shallow water where the swans can reach the bottom for immediate consumption. This allows them to feed with the help of water and if the food is not eaten the fish will consume. If the swans are not present or you would like to

place food by the lake for the swans to feed on for future consumption, more caution must be taken. Moldy food that is eaten can kill the swans. Make (or purchase) a feeder and place it at the water's edge of the lake. **The typical feeder should be** 10-12 inches higher than the water level. There is a plan of a 10" by 12" feeder in the October, 2003 Loop Scoop that can be found on the LOOP web site (www.loop-news.org). A more recent feeder is being used involving a 8" X10" baking pan with holes supported on 2- 1X4 legs, and a top made of a slightly bigger cookie sheet and The feeder must be self-draining to allow wet food to quickly dry. This can be done with a screen on the bottom or a perforated pan.





Several slightly more complicated designs include a solid roof and of a screened circular guard enclosed at the back to prevent ducks from eating the food (similar to a semi-circular tube).

Another important precaution when installing a feeder is to check and clear the lake floor of debris. Especially be on the lookout for lead fishing weights. Swans drop the food in the water infront of the feeder and eat from the lake floor. There have been several times we suspect that our swans and cygnets have ingested fishing weights and have died of lead poisoning.

Feeding is not precise to say the least. The chart below gives a summary of the daily feedings. Remember several residents feed the swans so this responsibility is divided up. *If you stop feeding* please let the Swan Committee or Lakes and Grounds Chairperson know so we can adjust the feeding if necessary.

# Base feeding Table (per Lake)

Season	Food type	Frequency	Amount of food per swan per day	Notes
Summer	Cracked Corn or (3- grain) scratch	1-2 times a day, 2-3 days /week max.	1 large cup (14-16 oz)	This will feed 2-3 adults
Spring*	Layer Feed, (pellets)	1-2 times a day, 2-3 days /week max.	Cygnets (1 large cup for the group of 4-6)	* Wild Bird starter food will not be reimbursed.
Winter- spring	Layer Feed, (pellets)	1-2 times a day, 2-3 days /week max.	1-2 large cups (14- 16 oz)	This will feed 2-3 adults

<sup>\*</sup> We do not recommend "Wild Bird Starter" food for the cygnets. This is unnecessary and expensive because the adult swans eat the majority of it. We also don't recommend using "Swan" food (\$30/50lb bag) as this is unnecessary.

Layer (Laying?) pellets have worked well for all the swans and can be used summer or winter, with or without cygnets..

#### Contact with the swans

Our swans are semi-wild and we want to keep them in this state. This state provides us with the benefits of "geese control" with the minimum amount of absolute care. *Our swans can "fend for themselves"* under most circumstances, especially when they are in the water. This will change is we try to make "pets" of them. Contact can lead to the swans getting too familiar with humans and allowing them to be caught, touching them will also transmit diseases (both ways) and finally, getting that close will undoubtedly result in someone being injured by a swan. Therefore *contact with the swans should be avoided*. The swans are pretty curious and will come within a few of feet from a person especially if you are feeding them. Avoid making them walk to get food. Swans are not very agile on land and can be easily injured if scared or spooked. Swans will protect themselves and can injure persons and children that get too close or inadvertently corner them.

# Catching

There are not many reasons a swan must be caught. Catching a swan is very hard, and hazardous to both the swan and the catcher. The front bone in their huge wings can severely bruise and their nails can rip through clothing and cause lacerations to someone getting too close. Swans can be traumatized and injured very easily; some have been known to die during capture. When a swan is injured or needs medical attention, one of the members of the "swan committee" will arrange a capture. Capturing healthy swans usually require multiple people with a combination of boats, brooms and extreme care. Never grab a swan by the neck, this can very easily break its neck and cause death. We have chosen not to

publish how to catch a swan for the swan's protection. There are established methods of capturing and transporting swans published in several books and "The Swan Sanctuary."

# Moving swans (getting swans to move)

If a swan has wandered from the lake into a hazardous area there are several ways to get the swan(s) back to where you want them to be. All the ways should be do in a slow, calm fashion. Swans can out swim and out run you. Don't get them "riled" up or you will lose.

- 1) Swans will usually come if there is food involved. *First, try to fill a cup half full of food and shake it. The swans will usually follow you.* Walk backwards if possible and continue shaking the food to keep their attention. Once the swan(s) are away from the lake (or area you are trying to get them out of) come up behind them slowly, and <u>slowly</u> herd them in front of you. Once you get to the desired destination, drop the food into shallow water of the lake as a reward for the swans.
- 2) Herding is a also a good option. Make yourself as big as possible (with outstretched arms, wave a towel or even use a broom) to guide it back (like a shepherd) to the lake or a safe area. Walk slowly and if the swan does not retreat move a little closer and wave your arms and clap your hands. If this is not working get help from a swan committee member, the Lakes and Grounds Chairperson or the LOOP President to get the help of a qualified individual.
- 3) Making noise will usually "chase" a swan away from you. Making noise with pots etc. will drive a swan away.
- 4) Capturing a swan is the last option. Be sure to get help from someone who has done this (see catching above).

#### Mating/nesting

Swans usually mate for life. They will mate and set up a nest in spring around April or May. The first year they mate they will build a large (5-6 foot diameter) nest close to the edge of the lake. Both our swans picked a sheltered northern shore the first year but then moved to residences yards. A temporary fence needs to be erected around the nesting area to the lake to protect the swans from dogs, raccoons and yes, people. If the nest is not in a homeowner's yard the fence must be at least 8-10 feet away from the nest to prevent people form "poking" and throwing things at the swans...yes it has happened. Fences in private households can be placed closer to the nest. The pair will return to the same nesting spot each year if the netting spot was suitable/comfortable/safe. Note: that if you see the swans starting to make a nest in your yard, you must be prepared to protect it with a fence going to the lake. If you do not want to erect a fence, discourage the swans from nesting in your yard by moving their nesting material to a different location.

After mating occurs, the pen will take approximately 10 days to lay all the eggs. When they are all laid she will begin sitting on them for approximately 32 days. In a few hours after hatching the down-covered cygnets will dry out and venture into the water.

# Babies (cygnets)

Cygnets hatch in June and require some extra attention in the first few months of their arrival. Since swans are not native to the area **it is absolutely necessary to have one of the swan's wing "Pinioned**." This is a method of removing the last bone of one wing, unbalancing them, and therefore preventing them from flying away. Pinioning can be done

without anesthesia if it is done within 2-4 days of hatching (their pain/nervous system has not developed fully yet). Pinioning must be done with sterilized bandage type scissors (not serrated) and a coagulant to stop the bleeding (Bacitracin or similar). Pinioning should be done by someone familiar with the process (we had a veterinarian teach us and we have done it since). Pinioning is dangerous to both the swans and the people performing the service and pinioning should be done as a team to protect both the people involved and the swans. Scissors must be sterilized between birds and the blood loss must be minimized and stopped before returning the cygnet to the water. If pinioning is not done carefully and correctly it will harm or kill the cygnets.

Cygnets require higher protein feed such as "layer" pellets. Wild Bird Starter is not necessary. One 50 pound bag was sufficient to feed them for 3-4 months. Then they can go to regular feed.

Cygnets should be caught, tagged and sex determined as yearlings (tagging too early and the tags may get too tight). This is covered in the Tagging of swans section below. This way you can trade and match swans as needed.

# **Protecting the cygnets**

Over the past 3-4 years we have had a "hands off" approach to protecting the cygnet. We have lost all of the cygnets 14+ from 2007-2009. In 2010 we tried to protect then from land predators by fencing them in a section of the lake. We started small 20X40 feet, but the swans escaped. On Lake 2 we tried a larger area fencing off the whole west end of the lake by suspending a fence across from 1805 TLD to 1826 DC. This too was unsuccessful, escaping over and around through the fence. These are wild birds and they need to roam. What was a little more successful was the installation of a fence around the area they sat. This was the south end of dam 2. This fence prevented the swans, sitting on the bank, from being attached by dogs, foxes and raccoons etc.

In 2010 we had four cygnets survive only to fly away because the swans were mistakenly not pinioned. In 2011 we have 3 cygnets and fencing has not been installed as of June 2011. To date (11/2011) all the cygnets have survived.

# **Vets and Doctoring**

These are wild birds, and as such should not need a lot of doctor's care. Problem experienced have been fishing Lures in feet and necks, swallowed sinkers (swan passed away) and several attacks on the land. If a swan gets sick or injured, estimates should be secured as soon as possible. Vet bills should be limited to around \$100, with Board approval whenever possible. Extraordinary veterinary measures/costs should be avoided. Swans may be "put down" humanely by the vet if a swan cannot be cured for a reasonable cost (\$100-200 maximum total). Note that pinioning (see above) can be done with care by an approved, and knowledgeable resident but must be performed within a week of hatching.

#### Determining the sex of a swan

Determining the sex of an adult swan (if paired) can be done fairly easily. Male swans are larger, more aggressive, have a more pronounced "knob" on the top of their bill, many times they will also have a brighter bill. These are more pronounces when they are mating. This sound easy but when a mate is these features are hard to compare and the male loses some of the male features because he is not "paired." Also when a swan dies these differentiating features disappear. Sexing and tagging a swan (next section) is very important to keep track of the swans. A physical inspection of a reproductive organ is almost impossible for non-trained persons because the male organ is retracted and stored inside a pouch that looks like a female organ. The only reliable method is DNA analysis. This can be done with a feather

or a blood sample. Blood samples are less than \$20 per sample and fairly easy to obtain since one has to capture the swan a tag it. Blood sample kits are available for the DNA Sample lab (DDC Veterinary in Fairfield, Ohio (800-625-0874) <a href="mailto:contact@vetdnacenter.com">contact@vetdnacenter.com</a>.) To get a blood sample, capture the bird and carefully clip the end of the toe nail. Dab the sample card on the toe nail to get a "dime" sized sample. There are free sample kits available for the vendor listed at the end of this document, but basically one can use the back side of a 3"X5" card to deposit a "dime" sized sample of blood in the center, let dry and cover with a piece of paper to protect. The sheet must have our information on it, and an identifier for the swan such as "swan with red tag on right leg" on it. NOTE don' take a blood sample without tagging the swan (see below).

# Tagging of swans

Tagging swans is the only reliable way of keeping track of the population. Taking photos and trying to determine "who's who" is very unreliable and relies on people's eye and opinion. And as stated above features change when swans die or lose their mate. Tagging should not be done before that swans have grown to adult size (around 1 year). Tagging too early will possibly damage their leg if it gets too tight.

Professional tags can be bought on line or at most farm/feed stores but come in large quantities, can be expensive and some require a special tool to install. An alternative (Suggested by Dr. Bruno) is to get the larges (about ¼" wide) colored "zip tie" found in hardware stores and loosely install the tie around the swans leg, trimming the excess length. To avoid the tie from getting tighter one can slightly deform the tie to stop the tie from further engaging into the square "Catch." Having half a dozen ties can identify dozens of swans by place tags on different legs and using multiple ties. It is important that every swan has a unique identifier with a written log. Swans wander so never duplicate a tag even if the swans occupy different lakes.

### Adding or removing swans

At no time can swans be added or removed from the lakes without the expressed permission of the LOOP Board. We are in the process of tagging and determining the sex of all the swans (10-2011). Any swan that is added must be; healthy, tagged, verify that the swan is pinioned, have the sex determined (blood sample), verify the swan was purchased legally, and have a record that the swan is now the property of the LOOP.

# **Trading and Breeding**

It is desirable to trade swans to help with the breeding, but every transaction must be approved by the Board and supervised by the swan committee prior to any agreement or trade. Unauthorized additions or removal of swans will result in a LOOP fine. Unauthorized removal of swans will also be considered a theft, and reported to the police.

#### Additional Information

#### Vets used by the LOOP:

- 1) Original aviary vet (9/2005): Avalon Animal Hospital, 2585 Cruse Rd, Suite F, Lawrenceville, 30044 (770-822-5551). This was the original vet we used for "Bruiser" Lake 1 swan lead poisoning (fishing sinkers).
- 2) Dr. Bruno (2007 to present), Animal Medical Center, 552 Buford Drive NE, Lawrenceville, GA 30046 Tel. 770-963-7363

### **LOOP Swans purchased from:**

- 1) Original pair (Rhett and Scarlett), Lake 3. (3/2003) Purchased by J. Regan for \$1,000 from David "Woody" Brundige, R2, South Fulton, TN 38357. (502) 472-3733(day), (901)479-3017 (night) <a href="mailto:fultondc@bellsouth.net">fultondc@bellsouth.net</a>
- 2) Two additional pairs were purchase for Lake 2 and 3, (4/14/03) also from David "Woody" Brundidge (info above). The Kemper's picked these t pairs up to save the \$400 shipping
- 3) Lake 1 replacement (3/2004) "Bruiser" Knox swan and dog, 20 Versailles Ct, Wheeling, IL 60090, 847-392-7090. knoxswananddogs@aol.com
- 4) Jim gave one or two swans to Dr. Buno to cover the cost of care (future or past?). No details were written down or conveyed to the Board.
- 5) Jim Regan traded a swan cygnet was exchanged for an adult with "Stone Mountain" when a mate was killed. (date unknown but probably 2005 or 2006). Unfortunately the cygnet was not pinioned and the swan flew away within a year.
- 6) A swan was added to Lake 3 (un authorized) on September 25, 2011 and shortly removed sometime in October after asking the individual what was the intentions of adding the swan (a donation or personal pet).

**Books-** Swan Keeper's Handbook: A Guide to the Care of Captive Swans Additional Website information can be found on the Swan Sanctuary web site. http://www.wildlifeinformation.org/Subdirectories\_for\_Search2/SampleEL/Swan\_Guidelines/fulltext.htm

**Blood sample veterinary (for determining swan sex)-** DDC Veterinary in Fairfield, Ohio (800-625-0874) contact@vetdnacenter.com. Cost in 2011 was \$19/sample. They have free sample kits available on-line, but basically one can use the back side of a 3"X5" card to deposit a "dime" sized sample of blood in the center, let the blood dry and cover with a piece of paper to protect. The sample sheet must have our information on it, and an identifier for the swan such as "swan with red tag on right leg" on it.