# Wildlife Raise & Release

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#### WILDLIFE LAWS

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Thanks to everyone who provided material for this book. Their names appear at the end of each section they submitted.

# BIRDS

# **DOVES AND PEIGEONS\***

#### Formula

Feed cream of wheat made up the same way as for people, but substitute milk for the water and add vitamins. These babies are fed by regurgitation, with baby putting its beak in mom's beak to get the food. You can feed with an eyedropper or syringe with the needle removed.

#### **Feeding Instructions**

1 week old – 10 cc's of formula every 2 hours.

2 weeks old - about 15 cc's every 3 hours

3 weeks old – 20 cc's 3-4 times daily

At 3-4 weeks of age, place some small seed on the floor of the cage; the bird should start pecking. By 4-5 weeks it should be eating a lot of the seed by itself.

#### Growing Up

Baby doves have grey skin and are born with sparse white down covering most of their body. Pigeons have yellow down at birth. By the time the bird is one week old it has sprouted its wing feathers but they are still encased in their sheaths and only their very tips are showing. The stomach and rear end are still bare. Keep the bird on a heating pad, on the low setting until it is feathered.

By 2 weeks of age the bird is fully feathered and it may still have a few downy feathers sticking out of its head. It should be able to stand in its nest on strong legs. It was be preening and stretching its wings and legs. This is the time to put it in a cage with a perch (use branches, NOT dowels) which it needs to help its toes develop properly. Make a dish of water available. By 2  $\frac{1}{2}$  - 3 weeks of age it should start eating some food by itself but you still have to feed it according to schedule. Leave some food in the cage at all times.

By age 4 weeks it should be eating about 50% of its food by itself, and you should introduce it to the small seeds such as millet, thistle as well as sunflowers it will be eating in the wild (it won't be able to find dog food).

By age 5 weeks it should be eating totally by itself and at that time it needs to be put outside in a large cage, at least 3 feet square. It should be fed through a blind so that it can become wild and no longer associate people with its food which much consist of at least 75% the foods it will eat in the wild.

#### Releasing

Sometime after its 6 weeks old it will be ready to leave. It should have been eating solely on its own for about a week and no longer beg when you approach it. Early in the morning, after it has eaten, tie the cage door open and let it come out when it's ready. It may or may not leave right away or not till the next day. Keep food in the cage for as long as it comes back. The time may vary from 1-7 days or more. This type of gentle release is called "hacking back", a term borrowed from the raptors.

NOTE: Be sure to release your birds where other doves or pigeons live.

#### SOME TIPS

- Ask questions if you are not sure. Most people are glad to help.
- Keep food refrigerated.
- Don't give a baby bird water. It will get needed moisture from the food.
- Keep notes; you can consult them later.
- A berry box lined with white facial tissues makes a good nest. The tissues can be easily removed, one at a time when soiled.
- A heating pad turned on low, helps provide needed heat for a naked or partially feathered bird, if the house temperature is less than 80 degrees.
- Handle as little as possible. It is not a pet.
- Don't let the bird loose outside before it's time to release it. If it flies away, it may not return to you and since you can't fly after it, it will starve to death. Keep it caged for its own safety.
- Don't keep domesticated birds in the same area as the wild ones.

#### \*Feed pigeons twice the amount you give doves.

Submitted by: Bea Orendorff

# **DUCKS AND GEESE\***

#### Feeding

Mealworms and Chick Starter.

#### Identification

The majority of ducklings received are Wood ducks, Mallards or Mallard hybrids. Wood ducks are black all over with cream or pale yellow face markings. Mallards are black with dark yellow face markings. Hybrids can look like mallards or be completely yellow or black.

#### Housing

A 10 gallon aquarium or large box which allows the chicks to move around is suitable for housing. Use ½ inch hardware cloth for the floor (to keep the birds feathers from being soiled) at least 1 inch offs the bottom. Wire edges should be smooth so the ducklings' feet won't get cut or fur stripping can be laid around the edges for the same purpose. Cardboard boxes are not recommended since they disintegrate when they get wet. Suspend a 100 watt bulb or better yet, a heat lamp at on end of the box so that the chicks can warm themselves up but can also walk away if they want to. The brooder's temperature should be about 99° for hatchlings. Lower the temperature by 5° every week until they are feathered. After that they will no longer need the heat lamp.

Give the duckling's fresh water as often as possible. The same type of dish is suitable for the food. When the ducklings are almost completely feathered on the body (they won't have wing feathers yet) and as long as the temperature is at least 65° at night, they can be moved to an enclosed outdoor area with a pond.

#### Release

Ducks should be released on a lake or pond as soon as their wing feathers have grown and they can fly. Food should be provided for them for the first few days after release. By this time the ducklings will be about 2 months old. Since wood ducks like forest, they should be release in a pond near woods.

#### \*Geese take approximately twice as long.

# **INSECTIVORES**

#### Nighthawks, Swifts and Swallows

These birds' entire diet consists of insects. They typically have huge mouths with tiny beaks, because they fly with their mouths open and catch their food on the wing. They are incapable of picking up their food. When they are hand-raised they have to be given the diet outlined below and must be released within 2-3 days after they are very adept at flying. If they are not raised and release in this fashion, they shortly start loosing weight and die.

#### Feeding

Equal parts of plain yogurt and Nutri-cal (Obtained from your local vet or online) with a sprinkle of multi-vitamin added in. Dip mealworms in this solution before feeding.

Each bird should eat 4-6 "dipped" mealworms each hour. When feeding un-feathered birds, the mealworms should be "tenderized" by pinching the worm along the head and body with tweezers so that they can be digested. Once feathers begin to unfurl, part of a small piece of soaked-until-soft dog food should be added to each feeding and the birds should be fed every 2 hours.

#### Release

Fledgling insectivores require a large area to practice flying – at least  $10' \times 10' \times 6'$  high. After 3-4 days of practice flying and when the birds' wings cross by an inch or more when at rest, they can be released. Locate a group of the bird's own species and toss the bird in the air. It should fly up to join them. If it does not, try again the next day.

When releasing a nighthawk, this procedure should be performed in the evening since they are nocturnal. Chimney swifts can be easily located at dusk when they return to the smoke stack in which they roost at night. Swallows can be released at a pond's or lake's edge where swallows are likely to be found gliding just above the water surface, catching insects.

#### SOME TIPS

- Ask questions if you are not sure. Most people are glad to help.
- Don't give a baby bird water. It will get needed moisture from the food.
- Keep notes; you can consult them later.
- A berry box lined with white facial tissues makes a good nest. The tissues can be easily removed, one at a time when soiled. When raising a swift, attach a piece of cloth to the side of the box for the bird to hang on.
- A heating pad turned on low, helps provide needed heat for a naked or partially feathered bird, if the house temperature is less than 80 degrees.
- Blunt tweezers are very handy for feeding baby birds.
- Handle as little as possible. It is not a pet.
- If a baby refuses to gape for you, it may be that it is old enough to know that it's a bird and won't respond to you right away. To force-feed see page 37.
- Don't let the bird loose outside before it's time to release it. If it flies away, it may not return to you and since you can't fly after it, it will starve to death. Keep it caged for its own safety.
- Don't keep domesticated birds in the same area as wild ones.

#### Submitted by: Bea Orendorff

# **KEEPING FAIMLIES TOGETHER**

It is always best for young birds to be raised by their natural mothers, because they can teach them survival skills which their foster, human mothers cannot. We must always try to persuade the people who find the youngsters of this fact. Here are some guidelines which will help to determine if the baby needs to be taken in or not.

If the baby bird is naked or has pinfeathers and cannot move around freely, put it back in the nest. <u>It's not true that if a human touches it, its mother will desert it</u>; birds cannot smell, nor do they have an odor. Usually babies fall right under their nests; if the bird is lying at the foot of a tree, try to locate the nest, probably straight above. If its nest has fallen on the ground, secure it in the tree. If it is destroyed, make a new one out of a margarine tub by poking a couple of holes on the bottom for rain drainage, tying three or four strings around the rim and securing it close to the original nest site. If part of the original nest is available, line the new on with it before placing the babies in it, if the parent doesn't return immediately, don't despair; it can take a couple of hours.

If the baby birds is well-feathered and hopping around, leave it alone, it is a fledgling. At that age, the young bird is supposed to hope around in the bushes or under them and exercise its wings. A parent is probably close by. If the youngster is in the street, herd it back to the nearest bush.

Some birds, such as **killdeer**, nest on the ground. It is easy to tell a **killdeer chick.** Its nest will usually be in the country or a large graveled area in town. These youngsters are covered with down and have long legs but their feet are not webbed. They are only about 1  $\frac{1}{2}$ " long at birth which is when they are usually found by people. It is impossible to force-feed these birds for more than a feeding or two. Mother is almost always flying nearby, so the best thing to do is take the bird back where it came from and watch the sky for an adult who looks like the youngster.

**Chimney swifts** are swallow-like birds that nest in chimneys (they are the only small birds that do). They are strictly insectivorous (people are more apt to allow them to remain in their chimney if they know that). The parents take care of them in the chimney for about on month after which they leave home and fly around with the adults and catch insects on the wing. They only return to their chimney at night to roost.

The nest is constructed of sticks and saliva and attached to the inside chimney wall. Sometimes the nest falls down and if the damper is not quite closed, the babies fall through it and into the fireplace. It is very easy to reunite them with their parents by reaching through the damper and placing the young against the chimney wall. Their feet are designed to grip rough surfaces so they will climb up the wall and join their mother. If the homeowners don't want them back the following year, ask them to wait until October to have the chimney capped when these birds will migrate south for the winter.

**Woodpeckers** nest in tree cavities. If the nest tree is cut down but the section containing the nest is intact, it can be tied to a close by tree, preferably at about the same height.

A **Hummingbird's** nest is too delicate to reposition on a branch if the branch breaks off the tree but the branch itself can be tied to another branch.

# SONGBIRDS

#### Formula

For all nestlings except pigeons, doves and insectivores.

Dry dog food soaked in milk (it takes about an hour to soak through); squeeze dry. Mix 1 cup of this with mashed hard-boiled egg. (Keep a little looser for babies up to 2 weeks old) Add bird vitamins.

#### **Feeding Instructions**

Usually the baby birds gave as soon as the next box is moved. If not, tap the side of the nest gently. To feed, place a small size piece of food well back in the throat. Feed until the bird refuses to open up – then it's full. Baby birds must be fed for a 12 hour period daily. (For Example: 7 am - 7 pm.) From birth to 1 week old – feed every 15-20 mins.

1-2 weeks old	feed every 30 minutes
2-2 <sup>1</sup> ⁄ <sub>2</sub> weeks old	feed every 1-2 hours
2 ½ - 3 weeks old	feed every 2 hours
3-4 weeks old	feed every 3 hours
4-6 weeks old	feed every 4 hours or more.

**NOTE:** The above schedule applies to birds up to Robin size. For bigger birds such as Starlings, Blue Jays etc. feed according to the age group next to your bird's.

#### Growing up

By the time a bird is one week old it has sprouted its wing feathers but they are still encased in their sheaths and only their very tips are showing. The stomach and rear end are still bare. Keep the bird on a heating pad, on the low setting until it is feathered.

By 2 weeks of age the bird is fully feathered and it may still have a few downy feathers sticking out of its head. It should be able to stand in its nest on strong legs. It will be preening and stretching its wings and legs. This is the time to put it in a cage with a perch (use branches NOT dowel rods) which it needs to help its toes develop properly. Make a dish of water available. By 2  $\frac{1}{2}$ -3 weeks of age it should start eating some food by itself but you still have to feed it according to the schedule. Leave some food in the cage at all times.

By age 4 weeks it should be eating about 50% of its food by itself and you should introduce it to whatever foods it will be eating in the wild (it won't be able to find dog food in the wild). At this point you must make sure you know what kind of bird you have.

By the time it's 4 weeks old it must be eating totally by itself and at that time it needs to be put outside in a large cage, at least 3 feet square, and fed through a blind so that it can become wild and no longer associate people with its food which must consist o, at least 75% the foods it will eat in the wild.

#### Releasing

Sometime after it is 6 weeks old it will be ready to leave. It should have been eating solely on is own for a bout a week and no longer beg when you approach it. Early in the morning, after it has eaten, tie the cage door open and let it come out when it's ready. It may or may not leave right away or not till the next day. Keep food in the cage for as long as it comes back. This time may vary from 1-7 days or more, depending on the type of bird. This type of gentle release is called "hacking back", a term borrowed from the raptors.

**NOTE:** Be sure to release your bird where others of its kind live.

#### Some Tips

- Ask questions if you are not sure. Most people are glad to help.
- Keep food refrigerated. Take out only what you can use in a couple of hours.
- Don't give a baby bird water. It will get needed moisture from the food.
- Keep notes; you can consult them later.
- A berry box lined with white facial tissues makes a good nest. The tissues can be easily removed, one at time when soiled.
- A heating pad turned on low, helps provide needed heat for a partially feathered bird, if the house temperature is less than 80°.
- For best results a naked bird needs to be kept in a thermostatically controlled incubator set at 96-98°. Lower the temperature by 1° each day after the bird is 4-5 days old.
- Blunt tweezers are very handy for feeding baby birds.
- Handle as little as possible. It is not a pet.
- If a baby refuses to gape for you, it may be that it is old enough to know that it's a bird and won't respond to you right away. To force-feed see page 37.
- Don't let the bird loose outside before it's time to release it. If it flies away, it may not return to you and since you can't fly after it, it will starve to death. Keep it caged for its own safety.
- Don't keep domesticated birds in the same are as the wild ones.

Submitted By: Bea Orendorff

# SPECIAL INTEREST BIRDS

#### Bluebirds, Orioles, Warblers and Wrens

Several of the birds we sometimes receive can be given the dog food diet but require other foods as well so that they will grow healthy. Birds such as the above, feed heavily on insects therefore 50% of their diet must consist of mealworms and crickets and the other 50\$ of the dog food formula. Failure to do so usually causes these youngsters to have very weak legs that will not support their weight or even in very brittle bones which break in several places and are very difficult to mend.

#### Formula

Dry dog food soaked in milk (it takes about an hour to soak through); squeeze dry. Mix about 1 cup of this with 1 mashed hard-boiled egg. (Keep a little looser for babies up to 2 weeks old.) Add bird vitamins.

#### **Feeding Instructions**

Usually baby birds gape as soon as the next box is moved. If not, tap the side of the nest gently. To feed, place a small size piece of food well back in the throat. Feed until the bird refuses to open up – then it's full. Baby birds must be fed for 12 hour period daily (i.e. 7 am to 7 pm.) From birth to 1 week old – feed every 15-20 minutes.

1-2 weeks old	feed every ½ hour
2-2 <sup>1</sup> / <sub>2</sub> weeks old	feed every 1-2 hours
$2\frac{1}{2}$ - 3 weeks old	feed every 2 hours
3-4 weeks old	feed every 3 hours
4-6 weeks old	feed every 4 hours or more.

#### Growing up

By the time a bird is one week old it has sprouted its wing feathers but they are still encased in their sheaths and only their very tips are showing. The stomach and rear end are still bare. Keep on a heating pad, on the low setting until the bird is feathered.

By 2 weeks of age the bird is fully feathered and it may still have a few downy feathers ticking out of its head. It should be able to stand in its nest on strong legs. It will be preening and stretching its wings and legs. This is the time to put it in a cage with a perch (use branches NOT dowels rods) which it needs to help its toes develop properly. Make a dish of water available. By  $2\frac{1}{2}$  - 3 weeks of age it should start eating some food by itself but you still have to feed it according to the schedule. Leave some food in the cage at all times.

By age 4 weeks it should be eating about 50% of its food by itself and you should introduce it to whatever foods it will be eating in the wild (it won't be able to find dog food in the wild). At this point you must make sure you know what kind of bird you have.

By the time it's 5 weeks old it must be eating totally by itself and at that time it needs to be put outside in a large cage, at least 3 feet square, and fed through a blind so that it can become wild and no longer associate people its food which must consist of, at least 75% the foods it will eat in the wild.

#### Releasing

Sometime after its 6 weeks old it will be ready to leave. It should have been eating solely on its own for about a week and no longer beg when you approach it. Early in the morning, after it has eaten, tie the cage door open and let it come out when it's ready. It may or may not leave right away or not till the next day. Keep food in the cage for as long as it comes back. This time may vary from 1-7 days or more, depending on the type of bird. This type of gentle release is called "hacking back", a term borrowed from the raptor society.

#### NOTE: Be sure to release your bird where others of its kind live.

#### SOME TIPS

- Ask question if you are not sure. Most people are glad to help
- Keep food refrigerated. Take out only what you can use in a couple of hours.
- Don't give a baby bird water. It will get needed moisture from the food.
- Keep notes; you can consult them later.
- A berry box lined with white facial tissues makes a good nest. The tissues can be easily removed, on at a time when soiled.
- A heating pad turned on low, helps provide needed heat for a naked or partially feathered bird, if the house temperature is less than 80 degrees.
- Blunt tweezers are very handy for feeding baby birds. (Hemostats work best)
- Handle as little as possible. It is not a pet.
- If a baby refuses to gape for you, it may be that it is old enough to know that it's a bird and won't respond to you right away. To force-feed see page 37
- Don't let the bird loose outside before it's time to release it. If it flies away, it may not return to you and since you can't fly after it, it will starve to death. Keep it caged for its own safety.
- Don't keep domesticated birds in the same area as the wild ones.

#### Crows

In the wild crows' diets include animal matter so in captivity they may be given mice, mealworms and crickets in addition to the dog food mixture.

Crows have a very intricate social system. A youngster raised by its parents has to learn where it "fits" in its group and what role it will play in it, such as lookout for enemies or scout for feeding areas etc. Since we cannot teach them these things we must raise them with other crows if possible, so they can learn to relate to their own kind.

#### Hummingbirds

In the wild, hummingbirds feed on flower nectar as well as insects and they feed both to their young. In captivity the chicks must be fed a mixture of both (NOT sugar-water which provides no nutrition) every 15-20 minutes through a special feeding tube until they learn to eat by themselves which they do when they are about 4-5 weeks old. Older youngsters may learn to eat from an eyedropper after their beaks are guided in it a few times. Humming birds must be taught to look for nectar in flowers and be flighted before they are released. Unlike other birds, youngsters need to practice flying.

#### Killdeer

Killdeer are precocial at birth but learn how to eat by imitating their mother. In captivity a chick of a more precocial species, such as quail, (which doesn't need a mother to learn to eat) can be substituted. Killdeer cannot be force-fed for any length of time because they go into shock easily and must start eating shortly after they are in captivity. Once they are too weak to stand on their feet, they rarely recover.

A 10 gallon aquarium with a 60 watt bulb suspended over one end of the box makes a good home for the chick. Use a very shallow dish such as a lid filled with pebbles for a water dish. (Killdeer will drown in even 1/4 inch deep water). The same type of dish is suitable for the food. Feed them mealworms and chicken starter or laying mash.

As with all other birds do not release them until they are fully flighted which they achieve when they are about two months old.

Submitted by: Bea Orendorff

# **FOOD ANIMALS**

### Crickets

A glass fruit jar pushed an inch or so down into sand in a flowerpot and covered with mosquito netting makes a satisfactory cage. A large drum or garbage can may be used if the upper few inches are varnished or waxed until slick. Again small mesh screening and several inches of clean, fine damp sane should be used. Slight dampness must be maintained for eggs to hatch in the sand. Egg cartons can be placed upright in the container to provide the crickets with places to hide.

Feeding is not difficult. Cotton in the water will prevent small crickets from drowning. Poultry laying mash is satisfactory as a food, but other types of feed can be used. A few grains of oatmeal, some fragments of lettuce or melon, a chicken bone or bit of meat will supply all the food required. If meat is not included in the diet, crickets see it by resorting to cannibalism.

Dead crickets should be removed. Occasionally there may be diseased crickets in the original stock. A pesticide should be used around the base of the container if ants, spiders, and possible parasites are suspected in causing cricket deaths. Straw or other such material should be placed over the surface of the sand to proved protection for the young.

At a temperature of about 80°F, cricket eggs hatch within 15-25 days. Temperatures between 70-90° can be maintained with a light bulb. They require about 3 months to reach maturity. Generally, for every inch in diameter of the container, two adults can be kept satisfactorily.

# NOTE: Crickets can be fed to all types of birds as well as raccoons and Opossums.

#### Mealworms

Mealworms are not worms at all but the larvae of the Darkling beetle. Mealworms are easily raised in a 10 gallon aquarium or a plastic sweater box. Fill the container half full with bran (it can be purchased at a feed store) and put the mealworms in it. Place a layer of newspapers on top of the bran. Once a week place half a slice apple in each container.

The mealworms eat the bran for nourishment and get their moisture from the apples. If it's very hot, the mealworms may need to be given apple twice a week. Once every 6 months to a year give them fresh bran. Save the old bran because it will contain eggs.

To speed up the process when starting the mealworm farms, place beetles and pupae as well as larvae (the mealworms) in the container.

NOTE: Mealworms can be fed to all juvenile and adult birds as well as Opossums.

#### Earthworms

A day before you get your earthworms set up a housing facility. This can be any wooden, plastic, glass or Styrofoam box about 1 'x 1 'x 1  $\frac{1}{2}$ '. This will accommodate 75-100 earthworms. A muslin or mesh lid will allow for ventilation, slow evaporation, and prevent escape.

Put at least 2" of soil in the bottom, preferably from the same site as you get your earthworms. Do not use clay. Place some partially rotted leaves on the surface. Keep the soil lightly moist by sprinkling as needed (about once a week). Overwatering is a common mistake.

Remove injured earthworms before introducing them to their new home. Place earthworms on the soil surface. After 15 minutes all worms should have burrowed under the soil. Discard any that have not dug under.

Keep the worms in a cool room (40-57 °F). High temperatures can be fatal. Basement rooms are ideal. Colonies can be kept outside if soil doesn't freeze solid. If too cold, earthworms will not breed. Change the soil every 6 months.

Worms are mature at 60-90 days. They can be recognized by an enlarged clitellum (a light band over segments 32-37). Earthworms are bisexual. When two worms mate they are held together by a band of mucus. Egg cocoons are about the size of a grain of rice and are brown, red or yellow depending upon the species.

Hatching varies with the species from a few days to a month. Each cocoon may produce 2-20 worms but averages 4-6. A healthy earthworm will produce a cocoon every 7-10 days.

If your colony becomes too crowded, transfer half to a new box or add them to your garden or feed them to your raise and release animals.

Earthworms eat decaying matter in the soil. As a precaution, always keep a layer of dry leaves on the surface.

NOTE: Opossums love earthworms. Fledgling robins can easily learn how to look for earthworms (one of their main source of nourishment), if they are given a shallow dish full of dirt with earthworms mixed in.

Submitted by: Randi Greathouse

# MAMMALS

## BATS

Bats are extremely difficult to raise successfully in captivity. The following directions have produced results in some cases.

#### Formula

1 part evaporated milk – 1 part water – a few drops Karo syrup. Keep formula refrigerated. Take out only what is needed for one feeding and discard the leftovers.

#### "Glop"

Macerated mealworms, mashed bananas, cream cheese, vitamins supplement – all mixed together.

#### Feeding

Birth – 2 weeks (feed every hour, about  $\frac{1}{2}$  cc) 2 weeks – 4 weeks (feed every 2 hours)

#### **Development**

Newborn – has no hair, eyes are closed – feed only the milk formula.

**<u>2 weeks old</u>** – eyes are open, thin coat of grey hair covers body. Feed the milk formula as well as the glop.

Keep bat at 85° while it's naked. Since bats like to hang upside down, place a screen over a box and hang a piece of cloth in it for the bat to snuggle with.

#### Weaning

Wean over a 2 week period. During that time gradually decrease the amount of formula given and replace with mealworms (beetles as well as larvae), grasshoppers and crickets.

When bat is fully flighted (around 6 weeks of age), release at dusk.

# NOTE: Wing membranes tend to dry easily. They can be lubricated with suntan lotion that contains coconut oil.

Submitted By: Dick Mills

## **CHIPMUNKS**

#### Formula

1 cup yogurt vanilla or plain – always use the same flavor 1 cup milk, 2 eggs yolks, vitamins

Mix yogurt, milk, eggs and vitamins together. Add baby cereal to thicken. Keep formula refrigerated. Take out only what is needed at each feeding and discard the left over.

#### Feeding

Hairless young: 2-6 drops, every 3-4 hours around the clock. Young with eyes open: 6-10 drops, 5 times a day.

#### Growing up

The baby should be kept in a towel lined box on a heating pad in an aquarium (they tend to escape easily). When the baby is about 6 weeks old it will venture out of its nest.

Start decreasing the formula when it starts to eat on its own. Provide it with nuts such as peanuts, walnuts (shelled), berries and seeds along with a dish of water.

#### Releasing

Once chipmunks start to feed themselves, they turn wild very quickly. When they are ready to be released they will become restless and attempt to bite when approached. Release in an established chipmunk area and provide food for the first few days.

Submitted by: Cheryl Brown

#### Development

Groundhogs are born hairless and their eyes open when they are 4 weeks old. They nurse until they are about 8 weeks old. In the wild the young leave the nest when they are around 10 weeks old.

#### Formula

A. 1 cup plain or vanilla yogurt
1 cup whole milk
2 eggs yolks
Several drops of baby vitamins

Blend above ingredients together and keep in a covered refrigerated container. Take our only the amount needed for one feeding and warm to body temperature. Discard left over formula.

**B.** 1 small can evaporated milk (not condensed milk) and 1 egg yolk. Use as described for formula A.

#### Feeding

Birth – 2 weeks old, feed every 2 hours – 2 to 10 drops (day and night) 3-4 weeks old, feed 1/3 oz. 5 times per day. 5-8 weeks old, feed 3 oz 3 times per day.

Use a plastic (not glass) eyedropper or syringe. Let the baby suck or lap the formula. Sometimes a baby will refuse the formula at first because it doesn't look, feel, smell or taste like mom. Usually within a day it will realize that this is as good as it's going to get and it will nurse eagerly, In fact, sometimes too eagerly. It may try to inhale the whole eyedropperful at once. This can lead to inhalation pneumonia if the formula goes into the lungs. You can prevent this from happening by: (1) filling the eyedropper only half way so even it if swallows it all at once, it won't inhale enough to harm itself, or (2) adding baby cereal to the formula to make it thicker and harder to draw out too quickly.

If formula comes out of the nostrils, the baby has inhaled too much too fast. Hold the baby in a head down position and gently swing it in a pendulum motion. Support the neck and back. This allows gravity to pull the formula out. Wipe off the nose and repeat the gentle swinging until no formula comes out.

As soon as possible the youngster should be weaned from the formula. Typical foods that groundhogs eat in the wild are clover, alfalfa and vegetables such as peas, lettuce and beans.

#### Housing

Until the baby is about 5 weeks old, it needs to be kept on a heating pad on the low setting. A cardboard box with soft towels to snuggle in makes a great bed for the baby. Put only half the box on the heating pad so the baby can off the heat if needed.

#### Release

After the youngster is weaned, it should spend more and more time outdoors. As soon as possible its wire cage should be outside permanently. At this time, the personal attention you've been giving it should be withdrawn. No touching or talking. The cage should be cleaned, food and water replenished and that's all! Groundhogs need to be wild before they are released. A grassy field in a secluded area, away from humans is a fine place to release these animals. Food should be provided for the first few days after release.

Submitted By: Cheryl Brown, Jan Dietrich

# **KEEPING FAMILIES TOGETHER**

Mammals, like birds do a better job raising their own young than humans do. Unlike birds they can smell the human scent on their young if they have been handled, but they are so intent on caring for them, that they ignore it. Animal mothers teach their offspring where to find food and which foods are good to eat, as well as who the predators are. Wildlife rehabilitators need to persuade callers to return young mammals to their mothers whenever possible.

#### Deer

Fawns know instinctively that when their mothers are not with them they must stay put wherever mom, has left them. They curl themselves up in a little ball and unless a person happens to stumble upon one, they are almost invisible. Since they have no odor, their predators cannot smell them.

Unless the youngster found by a concerned person is very weak, has flies buzzing around its head or looks like it is dying, it is best to leave it alone. If the person calling took the fawn home but has had it for no more than 12 hours, advise him/her to take it back where it was found. If the person has the time he/she can watch from a long distance to see if mom comes back but it could be a wait of several hours.

#### Rabbits

Bunnies are fed by their mother twice a day: at dusk and at dawn. Mother won't necessarily stay in the nest through the night. She quietly and carefully comes to feed and leaves the same way. Unless the soft fur, covering the nest is very disturbed or the bunnies look like they are on their last breath, they are probably not orphans.

Bunnies leave the nest when they are very small but are fully able to care for themselves. If they fit in the palm of your hand, their ears are up and they are plump, they should be turned loose in a secluded grassy area. When bunnies are kept in captivity and handled unnecessarily, they usually die.

#### Raccoons

Raccoons like to nest in tree cavities, but when these are unavailable they will nest in attics. Babies younger than 5-6 weeks old are usually quiet so that they won't attract attention to them. If you find a baby out of the nest and it is crying a lot, it is probably lost. If the mother cannot be located, take it in.

#### Opossums

Possums being nocturnal creatures they usually do not encounter people, unless they should to choose someone's deck, porch, or other such structure to sleep under during the day. When that happens during the breeding season and the opossum has young with her, the people usually think that the mother has made a nest there.

Opossums do not use a nest to rear their offspring. When young opossums are about 3 months old they come out of the mother's pouch and climb on her back. They remain there, traveling with her until they are old enough to fend for themselves.

If a person finds a young opossum which is not old enough to be on its own the youngster probably fell off mom and was unable to get back on before its mother moved on. Mother opossum will not go back to look for the lost youngster.

#### Squirrels

Young squirrels are usually discovered when a tree containing a squirrel nest falls down or is cut down. The young should be left at the base of the tree (if they are very active they can be placed in a box) and all people should clear the area and watch from a distance. These animals have at least two nests: one which they use year round for sleeping and on which they construct for rearing their babies. If one is destroyed, the mother will usually mover her young, one by one, to the other nest.

If you find a baby so young that its eyes are closed, and the mother doesn't come to retrieve it in 1-2 hours, take it in. In the very early spring, when it is very cold the waiting time should be appropriately decreased. Often if mother gets killed the young get driven out of the security of their nest by hunger.

Submitted By: The Raise & Release Volunteers

# OPOSSUMS

#### Development

The opossum's gestation period is about 12 days. At birth the babies are the size of a honeybee and are extremely undeveloped except for the front legs and claws which are fairly well developed because at birth they must crawl from the birth canal to the pouch where they will attach themselves to a nipple for the next 64 days. Development is as follows:

- **17 days old** the hind legs and tail become functional.
- **36 days old** whiskers are showing around the mouth.
- **46 days old** body hair begins to be seen on the back.
- **64 days old** the mouth and eyes open. They are able to leave the pouch, but they still depend on their mother for nursing and would die if abandoned.
- **71 days old** they are able to control their body temperature and begin to travel on their mother's back.
- 78 days old teeth develop and they can chew and swallow food.
- **80-90 days old** 4"-5" long without counting the tail they have their full set of 50 teeth, their ears turn black and they are weaned.
- 90 100 days old independent from mom.

#### Formulas

1) 1 can evaporated milk, one can water, one large eye yolk

2) 1 cup 2% milk, 2 eggs yolks, pet vitamins. 1 cup yogurt (plain or vanilla – always use the same flavor, the animal can tell the difference.

Add a calcium supplement such as Pet-Cal (opossums frequently have calcium deficiencies which can cause bone deformities).

Baby cereal (oatmeal, Hi-Pro, rice) may be added to the formula to keep it from running out of the mouth.

**NOTE:** Because baby opossums have difficulty suckling from a pet nurser, a medicine dropper or a latex dropper can give better results. For smaller opossums (46 days or younger), a monoject glue syringe which can be purchased at craft stores, is very successful.

#### Feeding

It is almost impossible to feed opossums less than 46 days old. Their mouths are sealed too tightly to allow a feeder of any kind to penetrate.

**46-56 days old** – feed  $\frac{1}{2}$  - 1 cc, every 2 hours around the clock. **56-68 days old** – feed 1-2 cc's, every 3 hours, discontinue the night feedings. **68-78 days old** – feed several ccs every 4 hours.

After all the babies are fed, offer food to them a second time, when they are full, they will stop hissing and they will settle down.

#### Growing up

Baby opossums need to be kept on a heating pad until they are 71 days old when they can control their own body temperature, but it doesn't hurt to keep them on it a few more days. Keep the pad under half of the cage or box so the youngsters can crawl away if they become to warm.

The amount of cereal in the formula can be increased gradually until it is too thick to be fed in the bottle. At this time the formula can be fed from a shallow dish such as a jar lid. Adding baby food fruit (bananas, apple sauce, pears, etc) can make the formula more enticing since opossums smell very well. You may have to show them where the food is.

When the opossums are about 78 days old and after they have grown accustomed to eating from the jar lid, new foods can be added daily. Good starter foods include: well mashed fruits and vegetables (sweet potatoes and bananas are favorites.) In a few days it will no longer be necessary to mash the fruits and vegetables and meat can be added to the diet. However fruits and vegetables should not exceed 10% of the total diet. Canned dog food is recommended (be sure the can says complete diet for dogs). Add a little dog food to the formula mixture and again, gradually increase the amount of dog food until the opossums are eating just the dog food. At this point dry dog food can be left in the cage for the opossums to snack on. The fruits may still be included in the diet and a bowl of water must be in the cage at all times.

**NOTE:** The baby should also be offered all the kids of food it will be eating in the wild. These foods include: bugs (crickets, grasshoppers, pill bugs), worms, carrion, bones with meat on them, chicken, hard boiled eggs (opossums will eat eggs in the wild – at first peel the eggs and later leave the shell on for them to break). Since this species is nocturnal, the main meal should be fed in the early evening.

#### **Favorite Foods**

Dog or cat food – canned or dry Bananas Apples – Applesauce Cheese, cottage cheese Chicken Watermelon

#### Stimulation

Opossums need to be "piddled" to urinate and defecate until they are about 64 days when their eyes open. This is accomplished by rubbing the genital area with a warm, moist cloth.

#### Release

The opossums should be allowed to wander around the yard and explore for several days before they are released. Encourage them to find their own food by showing them where to look for the worms and bugs and other things they might eat. When they are successful on these outings it is time to release them. Be sure to provide food for the opossums for several days until they are adept at finding enough food for themselves. **Submitted By: Teri Fuldner** 

# RABBITS

#### DO

**a)** Mark your calendar when you get the bunnies. Be sure you write down your estimate of their ages.

**b)** Only heat the formula you will use for that feeding. Do not reuse formula that has been heated. Throw it away

**c)** Open a new can of evaporated milk every two to three days. Discard unused portion of old can.

#### DON'T

a) Handle them more than absolutely necessary or roughly.

- b) Feed them more than twice daily
- c) Let them around household pets or children
- d) Feed them eggs, honey, or Karo syrup (when nursing).
- e) Feed them lettuce, cabbage, white clover, baby food or baby cereal.

#### How to determine the age of a bunny

Wild rabbits are born with hair and teeth. Baby bunnies open their eyes 5-7 days of age. This doesn't mean the **ALWAYS** keep their eyes open, it just means they're **ABLE** to open their eyes. It goes without saying that you should **NEVER** for their eyes open!

Around day 8 or 9 the ears will stand up. At about 10-12 days of age, the bunnies shape changes from long and skinny to short and plump and their fur gets thicker and fluffier.

#### **Care Instructions**

#### Birth to 6 days old

Baby bunnies should be kept in a cardboard box with newspaper (black and white only – no colored sections) on the bottom. Dried grass and/or pieces of clean cloth can be used for nesting material. Place ½ of the box on a heating pad turned on the lowest setting. (This is done so that the babies can crawl to the unheated side if the become to warm.) The bunnies are fed a formula of ½ strength evaporated milk. At this age, best results are obtained by using a small eye dropper to feed the babies. Mix ½ cup of evaporated milk with ½ cup boiled water. Pour about 1 ounce into a small bowl and heat the formula until it is just slightly warmer that the milk you would feed a human baby. If you have a microwave oven you're in luck because the formula **MUST** be kept very warm. As soon as it starts to cool the bunnies will refuse to drink it, so you'll have to keep reheating it throughout the feeding.

Feed the bunnies in an upright position, **NOT** on their backs. Their tails should be pointing toward the floor and their backs toward a wall. Be sure to keep the formula out of their noses (many babies are lost because of pneumonia from inhaling milk). Begin by placing a drop of milk on the bunny's lips. It may take a while until the bunny starts to swallow the milk as it seeps in its mouth. Once it starts swallowing, just keep the milk coming drop by drop. After the first few feedings it gets much easier and takes much less time.

After you've fed all the bunnies, wait 10-15 minutes and feed them all over again. Let them eat as much as they want. Repeat again in the evening.

**Remember:** Bunnies are always "double fed", and they're only fed twice-a-day – once in the morning and once at night. They should be drinking between 1 -3 cc's (ml) per feeding. Don't count what doesn't go into the bunny, i.e. the milk that runs into your lap or down your elbow.

At this age, the bunnies cannot urinate without stimulation. Their mother usually provides this by licking them. It is very important that at each feeding (once in the morning and once at night) you take a tissue, wet one end in warm water and lightly run the rabbit's bottom until he urinates (this is called piddling). Failure to do this may result in the death of the bunny!

#### 6 to 10 days old

Once you see that the bunnies are urinating in their box without your help, you may stop piddling them.

By this time the bunnies are able to control their body temperatures very well by themselves so you can take them off the heating pad. Of course, they shouldn't be kept near drafts or air conditioning vents.

Continue to feed them exactly as you have been. They will be taking more at each feeding (about 3-5 ccs).

#### 10 to 15 days old

When the bunnies are about 10 days of age they're ready to begin weaning. They should be put into a larger box with nesting materials on one side and food on the other. Place some formula in a small dish in the box. Be sure to use a dish that cannot easily be tipped over such as a jar lid. Place many different kinds of "greens" in the box. Some examples are carrots tops, dandelion weeds, purple clover and clover greens **(NEVER, NEVER give baby bunnies' white clover or white clover greens, as it will poison them!)** Also place cut carrots in the box. Do not feed the bunnies rabbit pellets (it's difficult for them to find rabbit pellets in the wild). Replace food and formula daily. Gradually decrease the amount of formula you are giving the bunnies. For example: on day 10, only "single feed" them in the morning and "double feed" them at night; on day 11 "single feed" them both morning and night, etc. At the same time, you should be decreasing the amount of formula in their water dish, gradually adding less formula and more water to the dish. They should be fully weaned by about 15-16 days of age.

#### 15 to 22 days old

Bunnies should be kept about 6 days after they are weaned to be sure they're eating enough food on their own. At about day 22 take them to a park or grassy area by a creek and release them early in the morning.

#### Injured bunnies

Unfortunately, it has been our experience that an injured bunny will rarely, if ever, survive. The injury does not have to be apparent. Any bunny that has been brought in by a cat or dog is considered injured. In these cases damage may not be evident but since the internal organs are extremely fragile, they don't usually survive. In these cases the most human thing to do may be to have the animal euthanized by a veterinarian.

#### Submitted By: Claudia Danilowicz

### RACCOONS

#### Development

At birth – baby raccoon is about 4" long and weights about 2 oz. It has a blunt muzzle, its ears are black, hairless and sealed, and its eyes are closed. The tail may or may or may not have stripes.

**3 weeks old** – muzzle starts to become pointy, ears start to rise, and eyes begin to open.

**1 month old** – eyes are open, weighs 2 lbs, sharp incisor and canine teeth are showing.

6 weeks old – baby looks like a small adult.

#### First aid for a young raccoon

If the baby feels cold to the touch when it arrives, **DO NOT FEED IT!** The body shuts down and cannot digest food. Warm it slowly by placing it in a box with a heating pad under it, till it feels warm to the touch; it may take a couple of hours. Determine how long it was separated from its mother. If more than 8 hours, start the baby on Gatorade 0 this will replace the electrolytes (essential body salts) that were lost. Feed every  $\frac{1}{2}$  - 1 hour with a small eye dropper. See feeding instructions for amount appropriate for is age. After 24 hours start feeding  $\frac{1}{2}$  strength formula. Increase the amount of formula gradually, until it is full strength.

If your youngster is vomiting or has diarrhea, consult your veterinarian. Both can and will kill babies quickly.

#### Formulas

- **A)** 1 cup plain or vanilla yogurt, 1 cup 2% milk, 1 egg yolk, feline vitamins, add baby rice cereal to slightly thicken.
- B) KMR (kitten milk replacement) follow directions on can

Use a regular baby bottle with a cross cut nipple. Be sure to refrigerate the powdered portions of KMR. Opened cans of powder are only good for one month. We recommend powdered formulas over the pre-mixed, liquid types.

#### Feeding

**Birth – 2 weeks Feed** 10-12 cc's every 2 – 3 hours, day and night. Baby should weigh about 8 oz. and needs to be piddled.\*

- **3 weeks** Feed 1-2 oz. 4-5 times a day. Baby should weigh 1-1 ½ lbs. and needs to be piddled.
- **4-5 weeks** Feed 2-3 oz. 3 times a day. Baby should weigh 1-1 ½ lbs. No need to piddle anymore.

# **6-7 weeks** Feed 4-5 oz. 3 times daily and introduce solid and semi-solid foods. (See weaning information)

#### CAUTION: NEVER REHEAT LEFTOVER FORMULA. THROW IT AWAY!

\*Piddling Rub the genital area with a warm, damp cloth to induce urination and bowel movements.

#### Weaning

Offer mashed bananas, cottage cheese, applesauce, graham crackers soaked in the formula, scrambled eggs, and dog food soaked in the formula, but not all at once. When the animal is used to one food, introduce it to another. After it is used to eating all the above food, it can be totally weaned from the formula. At this time it can also be introduced to table scraps. Start introducing the baby to its natural foods such as crawdads, hard-boiled eggs in the shell, and small live goldfish (feeder fish) in a bowl of water (for the youngster to catch).

#### Release

Raccoons should be released slowly in a heavily treed, secluded setting, as far away as possible from human settlements and highways. This place should have a constant source of water, such as a stream or creek. The youngster should be kept in a large cage until they are very wild and growl and flick their tails when approached by humans, (scrub cages daily with "Rocal" disinfectant and rinse with a strong spray of water). They should be completely nocturnal. They need to be wary of dogs, cars and people. Food should be made available for them for several days, after they are released, until they start finding their own.

#### **Raccoon behavior**

Babies younger than 5-6 weeks old should generally be quiet. If a baby in the wild is out of a nest and is crying a lot, it is probably lost. If the mother cannot be located it can be considered an orphan.

6-7 week old raccoons explore and climb and may follow mom outside the den but will not follow her down the tree. They are still nursing but are starting to wean. When babies this age are found by humans, they are usually truly orphans or they are lost. They can be housed outdoors.

When raccoons are about 3 months old they start to follow mom every night, and will stay with her until the breeding season in December. She teaches them all the survival skills they need to survive on their own.

If the young raccoon is fairly wild and is able to feed itself, allow it to remain wild. Do not tame it down.

#### Submitted By: Cheryl Brown, Jan Dietrich, Missy Galloway

# SQUIRRELS

Development (measurements given include tail)

**1** Day old -3" long, weighs about  $\frac{1}{2}$  oz. blind and naked, ears folded.

**1 week old** – 5" long, whiskers are beginning to grow.

**2 weeks old** – 6" long, hair is just beginning to show

- **3 weeks old** 7" long, ears are beginning to open and the bottom incisor teeth are beginning to grow.
- **4 weeks old** 8" long, silvery hair on back and tail, eyes are opening at the corners, upper incisors are about to break the gum, learning to stand, unable to curl its tail without assistance.
- 5 weeks old 10" long, has lower gnawing teeth, upper teeth showing, eyes are open but may look misty, will nibble on anything available, in the wild is still dependent on mother.

**6 weeks old** – 12" long, beginning to cut grinding teeth.

#### Formula

A. 1 cup plain or vanilla yogurt
1 cup whole milk
2 eggs yolks
Several drops of baby vitamins

Blend above ingredients together and keep in a covered refrigerated container. Take out only the amount needed for one feeding and warm to body temperature. Discard leftover formula.

B. 1 small can evaporated milk (not condensed milk) and 1 egg yolk. Refrigerate and use as describe for formula A. Do not use any sweeteners because squirrels are unable to easily digest sugars.

#### Feeding schedule

Birth – 2 weeks old	feed 2-20 drops every 2 hours day and night.
3-4 weeks old	feed 3-6 droppersful, discontinue night feedings
5 weeks old	feed 4-10 droppersfull every 4 hours

#### **Feeding Instructions**

Use a plastic (not glass) eyedropper or syringe. Let the squirrel suck or lap the formula. Sometimes a baby will refuse the formula at first because it doesn't look, feel, smell or taste like mom. Usually within a day it will realize that this is as good as it's going to get and it will nurse eagerly, in fact, sometimes too eagerly. It may try to inhale the whole eyedropperful at once. This can lead to inhalation pneumonia if the formula goes into the lungs. You can prevent this from happening by: (1) filling the eyedropper only half way so even if it swallows it all at once, it won't inhale enough to harm itself, or (2) adding baby cereal to the formula to make it thicker and hard to draw out to quickly.

If formula comes out of the nostrils, the baby has inhaled too much to fast. Hold the baby in a head down position and gently swing it in a pendulum motion. Support the neck and back. This allows gravity to pull the formula out. Wipe off the nose and repeat swinging until no formula comes out.

When the baby begins to be active and explore its surroundings, it is a good time to start adding solid food to its diet. This usually occurs when the youngster is about 4-5 weeks old. The frequency of the feedings can be reduced at this time. Solid foods, such as dry baby cereal (Gerber's Oatmeal or Hi-protein cereal) can be added to the formula. Be sure to keep it thin enough to flow through the nipple of the bottle or eyedropper.

The amount of cereal in the formula can be increased gradually until it is too thick to be fed in the bottle and can be fed in a jar lid. When the baby becomes accustomed to eating from the lid, it can be weaned into unsweetened dry cereals, unsalted shelled peanuts and pieces of fruit, sunflower seeds and soft nuts. Water should be available at all times. These foods should be offered at the regular feeding time before the formula is given. They can be left in the cage throughout the day.

**NOTE:** Young squirrels need to be stimulated (piddled) at each feeding. Use a warm moist towel or tissue and gently rub the genital area. Mother stimulates her youngsters when she licks and cleans them until they are able to go on their own.

#### Housing

Until the baby is about 5 weeks old, it needs to be kept on a heating pad on the low setting. A cardboard box with soft towels to snuggle in makes a great bed. Put the box half on the heating pad so the baby can get off the heat if needed. Some type of cover or lid is helpful because even squirrels with eyes closed can climb around.

When the baby's eyes are open it can be housed in a gerbil or hamster cage. Remember, squirrels are rodents and chew on everything. They will chew out of wood, cardboard and plastic. Soft towels should still be in their cage to hide under.

As the baby gets more agile, a cage made from  $\frac{1}{2}$  x  $\frac{1}{2}$  or 1" x 1" wire caging material is appropriate. This material is so stable that a wooden frame is not necessary. A wooden nest box fastened in the top corner should be available so the youngster will learn to go up and into the box when danger threatens.

After the baby is weaned, he should spend more and more time outdoors. As soon as possible his wire cage should be permanently outside. At this time, the personal attention you've been giving it should be withdrawn. No touching or talking. The cage should be cleaned, food and water replenished and that's all! These animals become wonderfully wild very easily if we give them a chance.

#### Release

The animal is ready to be released when it is able to eat the hard nuts found in the wild. These include acorns, maple keys (whirlybirds), buckeyes, and black walnuts. No one will crack the hard shells off for the youngster in the wild, so it must be able to do so before it can be released. Suitable squirrel release sites are areas which already have squirrels, trees for food and shelter and available water, as few predators as possible and little vehicle traffic. **Submitted By: Jan Dietrich** 

# WHITE-TAILED DEER

#### Formula

- **A.** Lamb's milk replacement (use according to directions)
- B. Goat's milk or sheep's milk

Use a baby bottle with a regular nipple, or better yet purchase a lamb nipple from a feed store. This nipple will fit over a pop bottle and is the right size for a fawn's mouth. Be sure to thoroughly wash the bottle and nipple after each feeding and throw away the leftover formula.

#### Feeding schedule

The fawn should eat about 5% of its body weight in formula, 3 times a day. Example: A 20 lb fawn would eat 16 oz, 3 times daily.

CAUTION: Overfeeding can cause diarrhea.

#### Weaning

When the fawn is of weaning age start offering alfalfa, wheat, clover and occasional offerings of apples, lettuce, carrots and corn. At the same time bottle feed the fawn only twice a day for the next 4 days, and once a day for the next 3 days. At the end of the week it should be weaned and eating completely by itself.

#### Housing

While very small, the fawn can be kept in any container which is large enough for it. When it becomes a little older and wants to move around more freely, a barn or other such large structure is more appropriate. The fawn can be bedded on straw or hay.

#### **Raising & Releasing**

It is best for the deer to be raised on a farm, on the site where it will be released. It can be taken on short walks, so that it can learn the area. It should be handled as little as possible because these animals tend to imprint very easily on humans, which could be dangerous to them since they would not shy away from people if they become hungry.

Ideally, a deer should be raised without ever coming in direct contact with the people who are raising it after the first few days. This can be accomplished in the following way: During the first 2-3 days, each time the deer is fed, the person raising it should make a clicking sound. Soon the fawn will associate the sound with food and will come willingly. At this time the fawn must be taken to an outdoor pen which is covered on 3 sides with burlap or tarps so it cannot see the people. The open side should face away from the house, towards the woods or field. Part or the entire top should be covered to provide shelter from the rain. Slits can be cut in the burlap through which the whole bottle or the nipple can fit so the fawn can be fed and observed. There must be no talking at all during this time.

Eventually when the deer is weaned and ready for release, the door on the uncovered side of the pen should be opened so the deer can leave. Food should be left for it under the pen, to come back to during the initial adjustment time. A deer raised this way will exhibit the same fear of humans as a mother-raised one.

An animal imprinted on humans, treats people the way it would treat others of its kind. When a hand-raised buck is in rut, he can be dangerous to humans because he imprinted them when he was young and now that he is in an aggressive state due to his hormone levels, he is not afraid to be near people and will in face consider them a threat to his territory. Such a buck may charge and is capable of severely injuring a person.

Every year dozens of young, hand-raised bucks must be destroyed by the authorities because they are potentially dangerous to humans when they enter populated areas.

Submitted By: Pat Boryca

#### Release

The animal is ready to be release when it is able to eat the hard nuts found in the wild. These include acorns, maple keys (whirly birds), buckeyes, and black walnuts. No one will crack the hard shells off for the youngster in the wild, so it must be able to do so before it can be released.

Suitable squirrel release sites are areas which already have squirrels, trees for food and shelter and available water, as few predators as possible and little vehicle traffic.

Submitted By: Jan Dietrich

# **MEDICAL SECTION**

#### CONSTIPATION

#### <u>Birds</u>

Add a small amount of berry to the food for a few feedings

#### <u>Mammals</u>

- **A.** Dilute formula for a few feedings
- **B.** Add a drop of cooking oil to formula

#### DEHYDRATION

It is difficult to detect dehydration in birds. The most common signs are lack of stools or very dry stools.

Mammals are dehydrated in various degrees if when the skin is pinched it doesn't flow back down immediately. The more server the degree of dehydration, the longer the time it takes for the skin to flow back down. Check with your vet for help.

#### DIARRHEA

A drop of Peptobismol can be placed directly in the animal's mouth to combat diarrhea.

**NOTE:** These are only guidelines. Please check with your vet for further instructions.

Submitted By: Jan Dietrich, Bea Orendorff

#### FORCE FEEDING

#### Birds

If a baby refuses to gape for you, it may be that it is old enough to know that it's a bird and you are not its mom and won't respond to you. You can force-feed it by making a feeding tube out of a 1cc syringe (insulin type) from which you cut the needle end off. (You can usually purchase similar type syringes at your local veterinarian). This will leave you with a tube. Fill it up from the plunger end by tapping it in the food to fill. **NEVER** give liquids to birds.

**NOTES:** Be sure to go past the opening to the trachea, located at the back of the tongue, when force-feeding a bird. If possible, have an experienced rehabilitator demonstrate the procedure the first time.

#### Mammals

Since force-feeding mammals can be tricky, please have an experienced rehabilitator or a vet demonstrate the procedure.

#### AIR SACS IN BIRDS

Air sacs are part of a bird's respiratory system and give buoyancy to waterfowl. They are located throughout the body and most birds have nine of them. Sometimes when a bird is caught by a cat or runs into a stationary object some of the air sacs are punctured, when that happens the air which was contained in the sac(s) spreads under the skin and gives the bird a bloated effect. Normally nothing needs to be done about it. The air will be reabsorbed into the air sacs within 3-4 days.

If this doesn't happen or if the burst air sacs constrict the bird's breathing, contact your bird veterinarian or an experienced bird rehabilitator.

#### PARASITE REMOVAL

#### Mites and Fleas

To removed mites from birds', sprinkle flea powder sparingly on the back of the bird's head, down the back and on and under the wings. Keep a close eye on the bird. If it should preen its feathers, it could ingest some of the flea powder.

Flea powder will also kill fleas on mammals. Several applications may be required. (When in doubt consult your exotic Veterinarian).

#### Maggots

Maggots are the larvae of house flies. House flies usually lay their eggs on dead matter and they are one of nature's great ways to clean the environment up of dead animals. Maggots are white and can be  $1/16^{\circ} - \frac{1}{4}^{\circ}$  long.

The best way to remove maggots from live animals is to flush them out. Use a syringe without the needle tip and squirt some water directly in the wound. This will force the maggots out where they can be removed with tweezers. Repeat this operation every half hour until all maggots are removed. Use flea spray to kill the egg sacks which are usually laid in the animal's fur around the wound.

#### Ticks

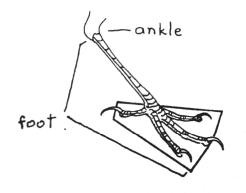
There are several ways to remove a tick from a mammal's skin (birds don't usually get ticks):

- Grab the tick at the base, where it is attached to the animal, twist and pull. However doing so may cause a slight infection to the animal. Protect yourself by wearing gloves if you have a cut on your finger, since ticks can carry Rocky Mountain spotted fever.
- Apply nail polish remover or alcohol on the tick. This will cause it to remove its head from the animal at which time you can remove it.
- They also sell special Tick Removal Devices at your local pet store.

#### **ORTHOPEDIC SHOES FOR BIRDS**

Most kinds of birds that raise and release places see have three toes pointing forward and on pointing backward. Notable exceptions are cuckoos and woodpeckers which have two toes pointing forward and two pointing backward. If bird's toes are not facing the right directions, it may be difficult for them to perch or land.

Sometimes baby birds arrive to us with all four toes facing forward or with all their toes clenched in a fist. The first problem can be easily solved by loosely taping the toe to the back of the foot with paper tape, (tape available over the counter at your local pharmacy) for 2-3 days. Usually this length of time will correct the problem. If it does not you may need to put the shoe back on again for 2-3 more days.



#### SPLAYED FEET IN BIRDS

This condition can often be corrected if detected at an early age, before the bones have hardened in their permanent state.

When a baby bird has splayed feet, it looks as if it has the opposite of pigeon toes, its entire feet, legs and up to the knees are turned sideways. The bird could never stand up unless the condition is corrected. It would fall flat on its stomach. If you have a baby bird with splayed feet, contact your bird veterinarian or experienced bird rehabilitator.

Submitted by: Bea Orendorff

#### WILDLIFE LAWS

#### **Bird Laws**

No person shall catch, kill, injure, pursue, or have in his possession, either dead or alive, or purchase, expose for sale, or ship to appoint within or without the state or receive or deliver for transportation any bird other than a game bird, or have in his possession any part of the plumage, skin, or body of any bird other than a game bird, except as described in the paragraph below.:

This section does not prohibit the lawful taking, killing, pursing, or possession of any game bird during the open season for such bird.

European Starlings and English or House Sparrows in both Ohio and Kentucky, Crows in Kentucky and common Pigeons in Ohio may be killed at any time except Sunday, and their nests or eggs may be destroyed at any time by anyone possessing a valid hunting license.

#### A violator of the above law is subject to a \$200.00 fine.

#### Mammal Laws

It shall be unlawful for any person to set, draw, maintain or otherwise use a leghold trap in Cincinnati. Any person violating this ordinance shall be fined not more than \$100.00, or imprisoned for not more than 60 days, or both.

Leghold traps are also illegal in Ohio except <u>during the hunting season for a particular</u> <u>animal.</u> Check with your game protector for dates.

Leghold traps are legal in Kentucky, but <u>must be checked daily</u>. Ask your game protector for more information about them.

NOTE: It is illegal to own any "game quadrupeds" suck as hares or rabbits, gray fox, or red squirrels, groundhogs (in Ohio only), or deer or any "fur-bearing animals" such as minks, weasels, fox, raccoons, skunks, opossums, muskrats and beavers without a license.

Provided By: Kentucky and Ohio Departments of Natural Resources