

# Rehabilitation of White-Tailed Deer

## INTRODUCTION

- The male or *buck* usually weighs from 130 to 220 pounds but, in rare cases, animals in excess of 350 pounds have been recorded. The female or *doe* usually weighs from 90 to 200 pounds, but some can weigh as much as 165 to 230 pounds. Fawns should weigh between 44 and 77 pounds by their first winter. Male fawns tend to be slightly larger and heavier than females.
- Does, give birth to one to three young at a time, usually in May or June and after a gestation period of seven months.
- The health and number of fawn born to any one doe is dependent on the conditions of the winter, available food source and the age and health of the doe.
- Most white-tailed deer live about 2 to 3 years. Maximum life span in the wild is 20 years but few live past 10 years old.

At birth the fawn usually weighs between 4-8 pounds. Their eyes are open and blue in color. Fawns are born with thick, gelatinous pads on their hooves, which are usually a pink or semi pink color. The hooves will darken after 1-2 days. Pink hooves can also signify a vitamin deficiency in the fawn's diet. At this age they will display a "freeze" behavior when approached by humans.

At two weeks of age a fawns eyes will have changed color from blue to brown and the umbilical cord will have fallen off. They will begin to nibble on grass and twigs and will eat dirt.

Generally up to three weeks of age fawns are easily approached. They can however kick and jump and will do so when you attempt to pick them up. Be aware that the hooves of deer are VERY sharp and can easily cut you.

At four weeks of age the fawn will begin to venture out with their mother.

## ABANDONED VERSUS HIDDEN

**Ninety-nine percent of fawns do not need to be admitted for rehabilitation because they are not “orphaned”.**

Fawns are born without an “odor” to attract predators and with their camouflage coloring they can blend into their surroundings very well. A doe will “hide” her fawn at night and although her choice of hiding spot may seem safe to her at the time it is actually somewhere in plain view once the sun comes up. People mistakenly believe the fawn is abandoned because the doe is not seen.

Generally if there is no dead doe in the area the fawn is not an orphan. You can always check the fawn’s stomach to see if it is full. The fawn’s stomach is located just in front of the hind legs. If the fawn has a full stomach, the belly will be in a straight line or slightly elevated from chest level.

## When Does a Fawn Need to be Rescued?

- If it is running or walking around aimlessly, crying for it’s mother.
- If it is injured or bleeding.
- If it has diarrhea or other signs of illness.
- If there are maggots or fly eggs on it.
- If it is lying on its side instead of lying in the normal position, which is on its stomach with the legs tucked under.

Note: A deer will grind its teeth if it is in pain.

A fawn may be reunited with its mother for up to twenty-four hours. Human scent does not cause the mother to reject the fawn and there is no need to wipe the fawn down after handling it. When trying to reunite a fawn with its mother, keep yourself and pets far away from the fawn. It may take a good twenty-four hours for a doe to feel safe enough to return to her baby. If after twenty-four hours the doe has not returned it is safe to assume the fawn is orphaned.

## TRANSPORT

At a young age a fawn can be easily transported by placing it in an open top box, laundry basket etc. and placing it on the seat of your car. They will usually settle down for the ride. Older fawns will require to be crated with the crate covered for transport.

### Transport Tips

**Do not** place the deer in a closed container without adequate ventilation during transport as hyperthermia can occur, which can result in death.

**Do not** sedate a deer for transport unless your veterinarian has provided you with a reversal agent and you are able to monitor the deer throughout the transport.

Drugs used for restraint, particularly xylazine, cause increased body temperature, decreased heart rate, decreased blood pressure and reduced respiratory rate. This will result in death. You must also take into account the outside temperature, which can increase the side effects of sedation medications. This is one of the reasons why these drugs **must** be reversed after use. A deer should not be sedated for any longer than thirty minutes maximum unless under the direct supervision of a veterinarian.

**Do not** restrain the legs of a deer for transport as this can result in fractured bones.

## INITIAL EVALUATION

- **Check body temperature.** Normal body temperature is 101 degrees. Warm or cool accordingly.
- **Check hydration.** Give subcutaneous or oral fluids as necessary. Initial dose 20cc/kg. 10cc/kg until hydration is reached before feeding.
- **Treat any injuries.**
- **Check weight.** Determine if emaciated and feed accordingly.
- **Determine age.** Check umbilical cord and eye color to help determine age.

## PREVENTATIVE TREATMENT

Covexin-8 - Helps assist in immunization that is naturally obtained from the mother.

Bo-Se – Selenium Supplement. Helps prevent lactic buildup in muscles that can cause capture myopathy.

LA-200 – Broad spectrum, long lasting antibiotic.

Corid – Assume all fawns have or will contract coccidia and add Corid to their bottles and later the water supply until release. I have also used Baycox if the fawn presents with bloody stool, which signifies coccidia.

Infant Vitamin Drops – Use for 7-10 days on fawns under two weeks of age. Do not use drops containing iron, as this will upset the developing rumen.

Ivermectin- To worm the fawns, this does not have to be done at intake, as it is dependent on the age of the fawn.

**DO NOT use topical flea or tick products on fawns as they have a tendency to lick themselves often and ingestion of these products can be fatal. The best way to rid the fawn of fleas and/or ticks is to soak a cloth with permethrin, which is non-toxic and wipe the fawn down with it.**

## HOUSING

Upon initial intake I house all of my fawns in playpens with a heating source that they can get off of themselves if they become too warm, thick bedding or blue pads, “hospital type” identification band around their neck to help identify them before I tag their ears. You should put a covering over the playpen and clamp it down at night.

## MILK REPLACERS

Colostrum (newborn) You can buy this powdered.

Goat's Milk

Zoologic Doe Milk Replacer

Kid's Milk Replacer

Lamb's Milk

Lamb or goat nipples with non-collapsible bottles work great as do regular baby bottles.

## FEEDING

Calculate how much formula based on the weight of the fawn.  
Approximately 10% of body weight per feeding.

Bottle should be held at a 45-degree downward angle so the fawn does not suck in air. The head should be raised and neck outstretched when feeding to insure the formula flows properly down the esophagus and into the stomach.

As they grow the fawn will stretch its front legs forward to lower their upper body into position so its head and neck are reaching comfortably for the bottle.

### Feeding Tips

- Do not feed a fawn if its neck is turned to the side.
- Only feed a fawn lying down if it is too debilitated to stand on its own.
- Be sure the nipple is secure to the bottle, as they will suck strenuously once they become accustomed to this new method of feeding.
- Fawns will also attempt to “butt” you with their heads; this is done on the doe to increase the flow of milk so be prepared.
- Always feed fawn on a non-slippery surface.

If you have trouble getting the fawn to nurse from a bottle try dipping the nipple in Karo syrup or something sweet to get them going. If all else fails try putting a nipple on a 20cc syringe and slowly feeding them this way. This however will not encourage them to suck so only use it as a last resort or if the fawn is sick or injured. Always remember to feel the tummy to insure it is full.

## FEEDING SCHEDULE

As the age of a fawn is not always easy to determine, I have found this feeding schedule works best for me:

- 4-6 pounds – 4-6 ounces per feeding. Four to five times daily.
- 7-10 pounds – 12-14 ounces per feeding. Four times daily.

- 10-12 pounds – Maximum of 16 ounces per feeding. Three times daily. At this weight they should be eating grain and browse as well.

**If using powdered formula it is always best to follow the directions supplied.**

At two weeks of age offer the fawn dirt, grain, branches and water, as they will begin to nibble. Mix deer pellets with a sweet feed such as calf manna to get the fawn interested in grain. Once they are eating grain readily you should remove the sweet feed from their diet.

### I do not use bottle racks.

I feel that with this method I cannot monitor how much the fawns are eating. You will not always have fawns the same age or weight and they will require different amounts of formula. The larger ones will also attempt to push the little ones out of the way so they can eat more than one bottle.

Note: Weigh your fawns on a regular basis to make sure they are gaining weight!

### ELIMINATION

The fawn will have to be stimulated to eliminate until they are about four weeks old. I put a blue pad under the fawn and use a pre moistened baby wipe and a gloved hand. A typical fawn will urinate for a LONG time... This is normal. They will begin to urinate on their own before they begin to defecate on their own. The stool should be firm and pelleted. I add a tablespoon of pumpkin (Libby's 100% pumpkin) to each bottle and the extra fiber usually makes for good stool. There is no need to put probiotics in the formula unless the fawn has diarrhea or is on antibiotics.

### Diarrhea

Soft stool does not constitute diarrhea. Diarrhea can usually be seen on the fur of rump and legs of the fawn. If the fawn has diarrhea, you're first concern is hydration. Diarrhea can be fatal to a young fawn very quickly.

## Treatment for Diarrhea

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- Add Probiotics to the bottle at each feeding.
- Pumpkin ¼ cup to each 8 ounces of formula.
- 1 cc 7% Tincture of Iodine added to the first bottle and .5cc to each subsequent bottle until diarrhea is gone.
- Colostrum in place of formula, this seems to work for any age.
- *Liquid Spectam Scour-Halt* 2cc twice a day for two days added to the bottle.
- *Scour Control 2* by Save-A-Caf (follow directions on bag)
- Prescription Neomycin Solution ¼ ml orally twice a day. (If diarrhea is bacterial).

## RUMINANTS

Deer are ruminants, meaning they are equipped with a four-chambered stomach. An interesting characteristic about the ruminant's stomach is that it allows the animal to gather a lot of food at once, then chew, and digest it later. The food first goes into the rumen, which stores 8 to 9 quarts of un-chewed food and acts as a fermentation vat. Most of the digestion occurs in this area of the stomach. The deer will then “chew its cud” and re-swallow the food, which will then pass to the second chamber, the reticulum, where it will remain for approximately sixteen hours before passing through the next two chambers. The food eventually passes through 67 feet of intestines, where most of the liquid is absorbed, leaving an impacted mass of undigested particles. These particles are passed out as excrement. A deer goes “to the bathroom” an average of 13 times every 24 hours.

DIGESTIVE SYSTEM The four-chambered stomach is needed to process the large quantities of low nutrient food the deer eats. The four sections of a deer's stomach are: the rumen, the reticulum, the omasum, and the abomasum.

## BLOAT

Bloat occurs when the fawn is unable to pass gas from the rumen. The rumen contents ferment and the fawn's left flank begins to swell due to the entrapment of fermentation gases. If left untreated bloat is fatal in a fawn. Bloat can be caused by over feeding and by abrupt changes in diet. Bloat will present on the left side of the fawn and you will see clear distention of the abdomen. You need to treat this immediately. [CHANGE SLIDE](#)

## Methods of Treatment for Bloat

A bloated animal should be kept standing upright. Massage the sides of the fawn to help expel the gases. Tilting the animal's head upward and keeping the mouth open slightly may be necessary if the fawn is grinding its teeth.

- One ounce of corn oil, peanut oil or soybean oil given orally.
- Gas drops containing simethicone.
- *Therabloat* – A product containing poloxalene
- Inserting a tube into the abdomen to relieve the gas.
- Rumenotomy-Rumen Puncture (use as a last resort).

## DEER PEN REQUIREMENTS

- **Size:** Approved by DEP at 1500 square feet. My pen is now 3,000 square feet – 32x96.
- **Fencing:** Wooden stockade fencing (eight foot high is available but is VERY expensive). Use six foot high topped with two feet of wire. The stockade will provide a visual barrier however; it would be optimal to have the pen where it cannot be disturbed by humans or pets. My pen is surrounded by an electric wire fence, one wire running along the top and one along the bottom to help keep out “climbers” or “diggers”. I also keep a padlock on the fence to my enclosure to keep people out.
- **Shelters:** A four-sided barn like structure (8x10) with one wall being removable or gated. You can add bales of hay as



insulation inside the barn. Do not use hay as bedding. It traps moisture causing health issues and is difficult to clean. Shavings work best. Change bedding as often as needed. You should have an electrical outlet available for light and a heat source for young fawns. I hang flycatchers in the shelter to help reduce insects. I also have a small isolation barn that the fawns often use as a shelter. [CHANGE SLIDE](#)

- [Browse](#) is required in the pen on a daily basis. I have tubes buried in the ground filled with water that I fill with fresh browse once or twice a day. This allows the deer to eat the leaves in an upright position, as they would do naturally. Remember to cover tube holes when not in use.
- ***Do not feed conifer, cherry, azaleas or the “landscape” variety of boxwood hedges as these have been known to result in death to the deer.*** Remember in the wild, the doe would teach the fawn what not to eat.
- **Ground Cover:** Every year I plant new grass in my pen and within one month of it being occupied by deer, the grass is gone. I try to create “blow downs” along the walls of my pen using trees, branches and logs. You can also use plantings to help with the drainage but remember to only plant what they can safely eat, and they will eat it all. Mud is an issue every year with any heavy rain. [CHANGE SLIDE](#)

Favorite foliage seems to be maple and grape vines.

- **FEEDERS:** I use upright bin feeders that are kept filled at all times. Secured to the fence and raised off the ground. Deer also drink A LOT of water and a fresh supply will be needed on a daily basis.

## [WEANING](#)

A fawn is fully ruminant at two months old but will take a bottle for as long as you offer it. Your deer should be weaned completely by four months of age. I wean my fawns off formula by cutting their bottles down from 16 ounces of formula three times a day to 16 ounces of formula, two times a day for one week. 16 ounces of formula once a day for one week

During the weaning process the fawns should be eating grain and browse on a regular basis. You may also supplement your fawn's diet with clover, whole grains, apples, grapes, grasses and hay.

### Food Supplement Tips

**Do not put a salt lick in your deer pen.** Your deer feed should be supplying the fawn with all the nutrients it needs in its diet. Too much sodium in a ruminant's diet can create calcium deposits that form stones in the urinary tract.

**Do not give your fawn unlimited amounts of corn.** Corn dried or fresh is okay for a small treat but on a regular basis it will provide energy but not help sustain weight. Corn can also cause "Founder's Disease" which will result in deformed hooves.

**Do not give deer inappropriate foodstuffs** such as bread, donuts, bagels etc. Even vegetables and fruits, when an unfamiliar part of a natural diet will cause stomach upset in a deer. They can literally eat themselves to death.

**DO** give fresh browse every day, fresh water every day and unlimited deer grain from self feeders.

### EAR TAGGING

All fawns must be tagged prior to release. You can do the tagging yourself or DEP can do it for you. The tags are yellow in color and are placed in the ear with a tagging gun. I found it is best to tag your fawns at twelve weeks of age. They are still fairly small and manageable at this age. If you wait until release time you will find it difficult to catch and restrain the deer for tagging.

### RELEASE

A fawn will begin losing its spots, at around four months of age. Its coat will turn to a grey-brown color that will remain throughout the fall and winter. This is when your fawns are ready to be released.

I release generally the first or second week in September when the foliage is still plentiful and the weather is generally mild. You want to pick a release site that has good browse, ground cover and a water source. The best release sites are, of course, where deer hunting is prohibited.

CHANGE SLIDE UNTIL MILLIE

## EUTHANASIA

These are **my** guidelines as to whether I will attempt to rehabilitate an injured fawn or suggest euthanasia.

- If the fawn has more than one broken leg or hip.
- If the fawn has a distended, hard belly signifying major internal bleeding.
- If the fawn has irreversible blindness due to injury.
- If the fawn is born with obvious genetic abnormalities, that would prevent release.

Any other life threatening injury or illness I will administer treatment, medications and/or pain relievers and then wait a minimum of 24 hours to see if any improvement or decline is observed.

### **How to Euthanize:**

Due to the fact that Pentobarbital is a controlled substance and it requires a large dose to humanely euthanize a fawn, I have found it impossible to obtain a prescription for this medication. Therefore it is best to consult your veterinarian to perform this service. If you are unable to contact a veterinarian or unable to afford their fee, the only other option I have used is a well-placed shot to the top of the head with a small caliber weapon. This is a quick, painless, humane way to end the suffering of an injured and/or sick fawn.

## CAPTURE MYOPATHY

The key feature of Capture Myopathy is HYPERTHERMIA, in other words an increase in body temperature.

Essentially Capture Myopathy is a disease associated with the capture or handling of any wild species of mammals or birds.

Capture Myopathy will occur when an animal is unable to cool itself and may result from a variety of factors including overexertion, medications, reduced blood flow, high environmental temperatures and FEAR.

It is characterized by skeletal and cardiac muscle damage. Animals may die suddenly or symptoms may appear up to a month following capture.

In rehabilitation this syndrome is most often associated with deer that have been chased by predators or have been captured and transported.

In human medicine the nearest equivalent to Capture Myopathy is “muscle melt down” of stressed athletes.

There is no cure for Capture Myopathy and it will result in death.

## CHRONIC WASTING DISEASE

Chronic wasting disease (CWD) is a neurological disease (brain and nervous system) that belongs to a family of diseases known as transmissible spongiform encephalopathies (TSE). This disease attacks the brains of deer, elk and moose and produces small lesions that eventually result in death.

No evidence exists that CWD affects humans or livestock.

### **How does CWD spread?**

The method of transmission of CWD is unknown, however there is strong evidence to suggest that abnormally shaped proteins called "prions" are responsible. The agent responsible for this disease may spread directly through animal-to-animal contact or indirectly through soil to animal contact.

It is thought that the most common mode of transmission from an infected animal is via saliva and feces.

CWD can be spread from region to region by the movement of captive deer or through the improper disposal of a harvested deer transported from a CWD infected area.

### **How can I tell if a deer has CWD?**

In early stages of infection, animals show no symptoms.

The incubation period can range from about 1-5 years.

In advanced stages, infected animals begin to display abnormal behavior, such as staggering or standing with very poor posture, carrying the head and ears in a lowered position.

In later stages of the disease, infected animals become emaciated.

Some symptoms of CWD also may be characteristic of other diseases and conditions (e.g., bacterial brain abscesses and epizootic hemorrhagic disease, or deer that have been injured in a deer-vehicle accident).

### **How is CWD diagnosed?**

Prior to 2008, the only method to definitively diagnose CWD was to examine the brain, tonsils, or lymph nodes in a laboratory. No live-animal test, vaccine, or treatment for CWD existed. However in 2008, researchers from the USDA and Colorado State University evaluated and validated the first live rectal-tissue biopsy method for detecting CWD in captive and wild elk. The live rectal biopsy test appears to be nearly as accurate as post-mortem diagnostic test. The key advantage to the rectal biopsy test is that it can be performed on live animals.

[MAP](#)

