




Eastern Grey Squirrels ~
16 weeks in less than
2 hours!


Betsy D. Shank, CWR

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Introduction



- Betsy D. Shank, CWR
- Acorn Acres Wildlife Rehabilitation
- Certified Wildlife Rehabilitator; (CWR) is a designation by the IWRC
- Pennsylvania permitted wildlife rehabilitator
- Rehabilitating PA squirrels since April 16, 2010




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Getting Started

"There are hundreds of ways to rehabilitate animals properly. There are just a few ways of doing it poorly. Just because your way isn't my way doesn't mean that they both don't work. What I am about to share with you is MY way and it works, yours may too!"

~ Diane Nickerson



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Getting Started

Here is a list of supplies you should have on hand when rehabilitating squirrels.

Heating pad (no auto-shut off) or an incubator and a traveling heat source (disk, hot hands, etc)	Syringes (1mL, 3mL, 5mL, 10mL)
Q-tips or Make-up cotton rounds and Tissue (no lotion)	Cage with 1/2" bar spacing – any larger can be dangerous – Release Cage (1/2" hardware cloth)
Nipples (Mini and Regular Miracle Nipples are my preferred)	Rodent block
Containers/Bins (small, medium, and large)	Candle/Coffee warmer
Fleece or non-woven fabrics (lots and lots)	Digital scale (g/kg)
Formula	Normal saline and Lactated ringers
Infant Nasal Aspirator (Little Remedies or Little Noses are my preferred)	Needles (gauges 23, 25, 28 – 5/8" is a great length)
Preparation H	Nest boxes
Chlorhexidine or Novasal	Items of enrichment
Wooden toys for chewing	Water bottles (inside bin and outside cage styles)
	Very sharp clippers or jewelry snips



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Aging

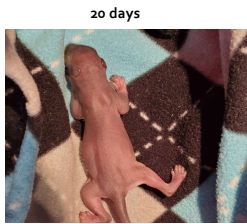
Approx. Age	Weight (grams)	Additional Comments
0-1 week	8-20	<ul style="list-style-type: none"> 3 inches long excluding tail pink, no fur eyes tightly closed
1-2 weeks	20-40	<ul style="list-style-type: none"> pink, scant fuzz of fur no fur on belly eyes closed



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Aging

Approx. Age	Weight (grams)	Additional Comments
2-3 weeks	40-60	<ul style="list-style-type: none"> 4 inches long excluding tail, thin fur all over eyes closed lower front teeth (incisors) erupt at about 3 weeks of age (19 – 21 days)



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Aging

Approx. Age	Weight (grams)	Additional Comments
3-4 weeks	60-90	<ul style="list-style-type: none"> 5 inches long excluding tail, fur all over

26 days






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Aging

Approx. Age	Weight (grams)	Additional Comments
4-5 weeks	90-130	<ul style="list-style-type: none"> 6 inches long excluding tail, fur all over, thinner fur on underside upper front teeth (incisors) erupt at 4-6 weeks of age starting to curl tail eyes open between 4-5 weeks (27-35 days old)

32 days






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Aging

Approx. Age	Weight (grams)	Additional Comments
5-8 weeks	130-190	<ul style="list-style-type: none"> 7-8 inches long, fur all over including underside of tail eyes fully open cheek teeth erupt at 7 weeks can sit up & hold food in front paws sleeping less, more active

48 days






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Aging

Approx. Age	Weight (grams)	Additional Comments
8-12 weeks	200+	<ul style="list-style-type: none"> • long fur • bushy tail • increasingly active • can climb well • By 12-13 weeks youngsters look like small adults

58 days






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Aging

Approx. Age	Weight (grams)	Additional Comments
13-16 weeks	300+	<ul style="list-style-type: none"> • By 12-13 weeks of age the youngsters look like small adults • Fully weaned

14 weeks


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ACORN ACRES
WILDLIFE REHABILITATION

Sexing

Eastern Grey Squirrels




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Sexing

- Boy squirrels have penises and girls do not!




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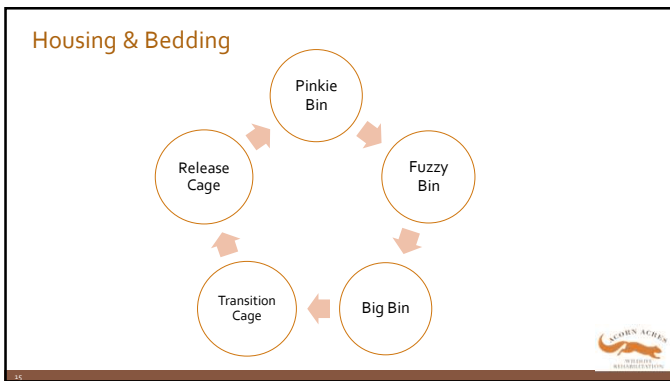


Housing & Bedding

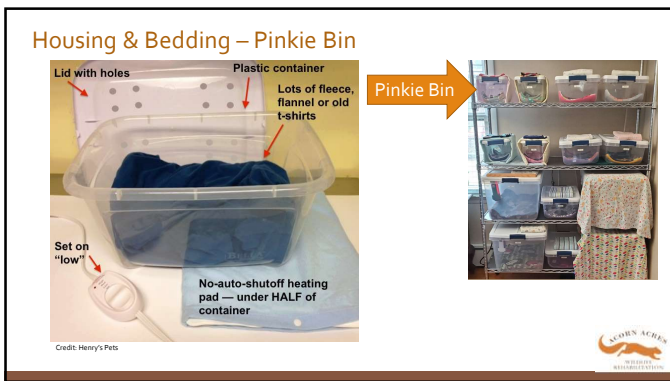
Eastern Grey Squirrels



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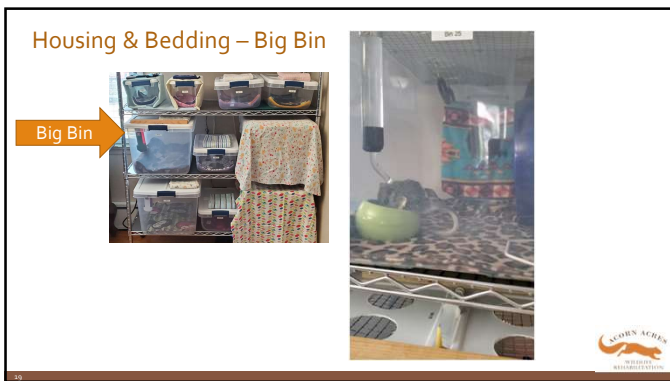
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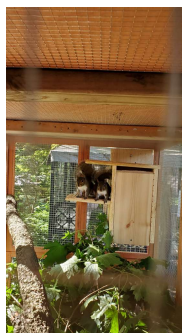
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Housing & Bedding – Release Cage



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Housing & Bedding – Release Cage



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Intake Assessment

Eastern Grey Squirrels



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Intake Assessment

- The information gathered here is for many uses!
- Asking for donations.
- Obtaining finders information for future contact and year end mailing and newsletters.
- It is also one of the first places the story of your patient is written.

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Intake Assessment

- No such thing as too much info.

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Common Life-Threatening Issues

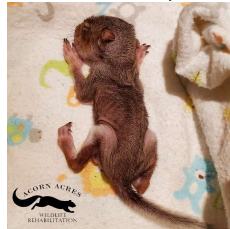
- Starvation
- Dehydration
- Aspiration pneumonia
- Ant bites
- Flystrike/Maggots



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Starvation

- The key is slow and steady, small frequent meals, and ample hydration.
- My preference for these cases is EmerAid Omnivore by Lafeber.

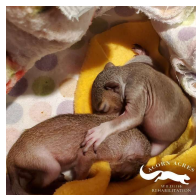


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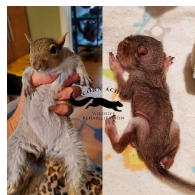
Starvation



One week after intake.



Two weeks after intake when introduced to her new sibling.



One of her last formula feedings before she weaned.



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Starvation

- Warm, Hydrate, wean to EmerAid, wean to formula.
- Patient is usually on full formula in about 10 days – allow them to guide you.



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Dehydration

The Wildlife EDU Fluid Therapy for Wildlife Rehabilitators class will provide a comprehensive understanding of dehydration/fluid therapy.	There is no good reason to starve an animal for 24 hours	Oral is fastest	If unable to swallow, sub-Q, then try oral (I rarely have to SQ)
Proper fluid therapy takes several days...they did not dehydrate in a single day and fluids lost cannot be replaced in a single day.	Do NOT mix your formula using hydration solution	You MAY pull up both formula and hydration solution in the same syringe as long as they are mixed independently as a way to wean patient onto formula (this can be viewed as controversial)	Monitor urine volume/color/odor



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Dehydration

My method is as follows:

- Intake – oral hydration solution
- 2nd and 3rd feedings – hydration solution
- 4th and 5th feedings – 75% hydration/25% formula
- 6th and 7th feedings – 50% hydration/50% formula
- 8th and 9th feedings – 25% hydration/75% formula
- 10th feeding and on patient is on full strength formula



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Dehydration

My accelerated method:

- 100% Electrostat for the first 2 feedings (generally, every 2-3 hours on a new intake)
- Next feeding: 75% Electrostat / 25% formula*
- Next feeding: 50% Electrostat / 50% formula*
- Next feeding: 25% Electrostat / 75% formula*
- Next feeding and ongoing: 100% formula*



** As you slowly transition to formula it will take longer for baby to digest, this is when you need to look at the milk line to gauge the amount of time between feedings.*



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Aspiration Pneumonia

- If a finder has offered fluids of any variety, ASSUME AP! You should be on guard and watching...2 days minimum.
- Sounds like cobwebs.
- Every. Single. One.
 - Once you hear the "click" you will be able to hear it from across the room the next time. It is a noise you do not forget.



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Aspiration Pneumonia

Okay so how the heck is it treated already!


- For squirrels with eyes closed, my preference is Baytril.
 - **This is highly controversial.** These guys crash hard and fast, sometimes you've got only hours. Baytril can turn them around.
- Eyes open my preference is Clavamox.
 - Some circles feel that squirrels cannot take Clavamox. They can, they tolerate it well, and it works very well.

Please have a plan, be prepared. Have the discussion with your vet NOW, do not wait until you have a sick baby!




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Ant Bites




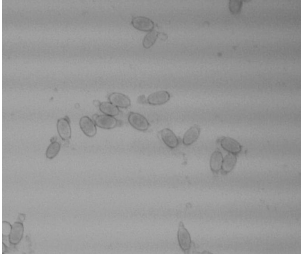
- Anticoagulant
- Necrotic tissue
- Antibiotic
- One sided
- They make it or they don't



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Coccidia

- Definition
- Clinical signs
- Symptoms
- Treatment
- Supportive



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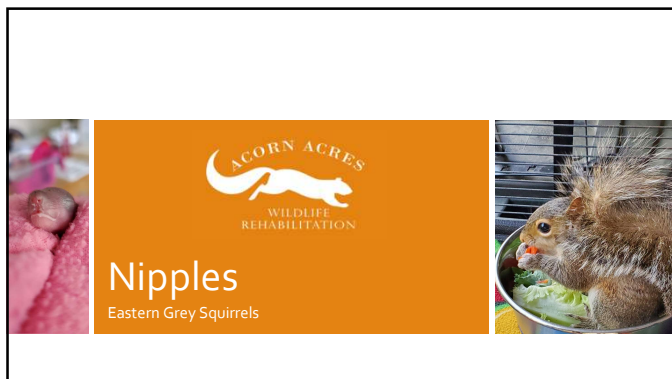
Flystrike/Maggots



- Dire emergency
- Do not get them wet
- Dry them out
- Capstar



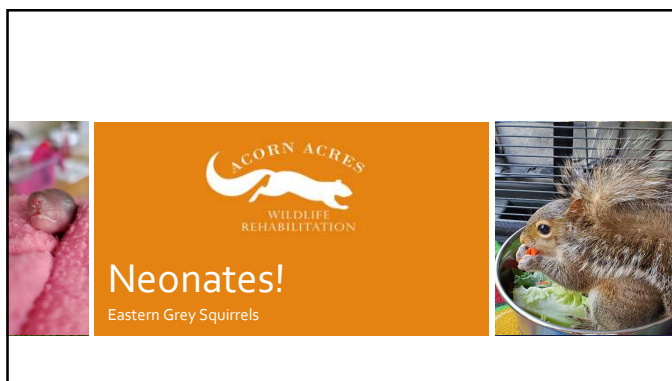
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Four Magic Words

- Warmth
- Hydration
- Consistency
- Patience



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Formula

Fox Valley	Esbilac	KMR
Goat's Milk	Zoologic	Scalded Milk




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Formula

- Availability.
- Which basket do you put your eggs in?

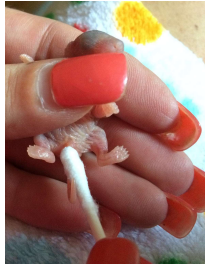
- Neonates (bald w/umbilicus – less than a week old).
- Pinkie through Fuzzy till eyes open.
- Eyes open till weaning.



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Potty Habits

- ALL babies must be stimulated to urinate and defecate.
- Q-tip for neonates.
- Cotton round for fuzzies.
- Tissues for juvenies.
- Watch for genital sucking.



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Milk Line

- Empty/Full



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Weighing

- Each morning each baby needs to be weighed.
- Remove baby from container, stimulate for urination/defecation, tare the scale, place on scale and record the weight on the Progress Chart. Be sure that the scale is set to GRAMS. If there is a large difference in weight from the prior day, re-tare the scale and weigh the baby again to double check.



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A presentation slide titled "Feeding Eastern Grey Squirrels". The slide has an orange background with the Acorn Acres Wildlife Rehabilitation logo at the top. On the left, there is a close-up photo of a baby squirrel's face. On the right, there is a photo of a squirrel eating from a bowl. The word "Feeding" is written in large white letters, with "Eastern Grey Squirrels" below it.

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Feeding Technique

- Hold the syringe so the tip points UP towards the roof of the mouth.



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Properly Holding a Syringe



- Control the plunger
- Underhand
- Overhand
- Never point down
- Never using thumb
- Head Up/Tail Down
- Belly Feed

Credit: Red Creek Wildlife Center



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Properly Holding a Syringe



Credit: Red Creek Wildlife Center




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Feeding Amounts

- Feed 5%-7% of body weight .
- The following chart is a **GUIDELINE**. It contains **ESTIMATES**. Amount to feed is based on weight of baby.

Age in Weeks	Amount to Feed*	How Often	Night Feeding
<1	.75-1 cc	Every 2-3 hours	Yes
1	1-2 cc	Every 3 hours	Yes
2	2-3 cc	Every 3-4 hours	If needed
3	4-5.5 cc	Every 3-4 hours	If needed
4	6-9 cc	Every 4 hours	No
5	10-12 cc	Every 4 hours	No
6	12-14 cc	Every 5 hours	No

*These are estimates. Amount fed should be based on weight of baby.
See 5-7% feeding rule



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Feeding Technique/Tips

- Starting the first feeding – GO SLOW!
- Dripping formula.
- Choking again and again – Snorklers!



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Feeding Technique/Tips

- Guppy face



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Feeding Technique/Tips

- Cross contamination



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Solid Foods



- When the eyes open, provide squirrels with quality rodent block.



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Solid Foods



- After you can see the evidence of rodent block in their poop you may start offering them healthy veggies, such as broccoli, cauliflower, bok choy, brussel sprouts, cabbage, and arugula.
- Tough love.



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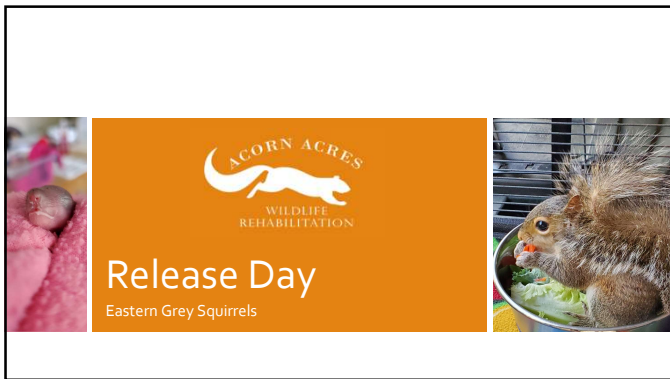
Time Lines



- Weaning
- Transition Cage
- Release Cage



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List of Suppliers


PawHut (release cages)	A & E Cages (transition cages)	Nuts About Squirrels (nest boxes)
Secret Squirrel Nesting Nooks (nest boxes)	Henry's Healthy Pets	Chris's Squirrels & More
Revival Animal	PennVet	Envigo



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Questions!
Eastern Grey Squirrels



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