

Opossum Orphan Care

California Wildlife Center

Sections adapted from protocols developed by Cathy Case

(Last modified 12/07/08)

Virginia Opossum (*Didelphis virginiana*)

Interesting facts:

- Opossums show significant immunity to the venom of rattlesnakes, cottonmouths, and other pit vipers
- Opossums are very resistant to Rabies virus, likely due to their low body temperature.

General characteristics:

- North America's only native marsupial
- Adult weight: up to 6.4kg (males); up to 3.7kg (females)
- Adult size: Can be just over 3 feet in length (including their tail)
- Life span: Approximately 1 – 2 years in the wild.
- A female opossum can give birth to over 20 babies, but the maximum that can survive is equal to the number of teats she has in her pouch, usually 13. The average litter size is about 8 offspring.
- Opossums have a prehensile tail that is used for grasping and wrapping around things like branches
- Opossums have a clawless opposable hallux as their first digit on their hind feet that also helps it for grasping.
- Opossums are nocturnal (active at night), using their keen sense of smell to help find food. Being omnivorous, they eat just about anything, including plants, fruits, insects, and carion. You can see why they are very important to the ecosystem

California Wildlife Center
Opossum Feeding Schedule
12/7/08

Weight (g)	Formula Type	Amount per feeding	Feeds per day	Diet Notes:
*Fox Valley 32/40 (2:1A): See "Formula Preparation" for detailed instructions				
30-45g	FV 2:1A	4% body wt	4x/day	Likely will require tube feedings
*Fox Valley 25/30 (2:1C): See "Formula Preparation" for detailed instructions				
46-50g	FV 2:1C	2.7cc	4x/day	Start encouraging to lap from dish
51-55g	FV 2:1C	3.0cc	4x/day	Offer formula in dish. If not lapping full amount, continue to syringe feed/tube feed to attain full feeding amount.
56-65g	FV 2:1C	3.4cc	4x/day	Continue to offer formula in dish. A small amount of applesauce or flavored yogurt can be added to increase palatability.
66-75g	FV 2:1C	3.8cc	4x/day	
76-85g	FV 4:2C	4.2cc	2x/day	Begin offering "Mush bowl". Mix together (per animal) - 1-2 tsp Gerber cereal to formula. - 1-2 tsp of vegetable baby food.
86-90g	FV 4:2C	4.4cc	2x/day	
91-100g	FV 4:2C	4.8cc	2x/day	Add separate dish of dry kitten chow and finely chopped vegetables/fruits.
101-110g	FV 4:2C	5.5cc	2x/day	Add small amounts of regular juvenile Opossum diet.
> 150g	N/A	N/A	PM diet	PM: Juvenile opossum diet
> 200g	N/A	N/A	PM diet	If eating well/gaining weight, move to outside enclosure

***Note: Monitor for appetite and continued weight gain. If not occurring, supplemental tube feedings are to be done to meet the required amounts.**

Release Notes:

- Release at 450 grams or more in a place where there is good ground cover, a water source, and where rodents and insects are likely to be found (refer to CWC release guidelines for further information).

Formula Preparation

There are several types and brands of substitute milk formulas available for infant opossums. Each type of formula has specific reconstitution instructions for feeding. California Wildlife Center uses Fox Valley formulas for most infant mammals.

Feeding formula ratios are always written with WATER as the first number, Formula as the second number, and any additional additives as the third number. (ie. Water:Formula:Cereal) All Fox Valley formulas are mixed with water at a ratio of 2:1 (2 parts water mixed with 1 part formula). This ratio must be maintained in order to provide proper nutrition.

When adding cereal for “Mush Bowls”, use dry baby cereal (Gerber or Beech-nut rice or multi grain) to mix into formula.

- FOX VALLEY 2:1A (32/40 FORMULA)
 - For neonate opossums up to about 45 grams or 2 weeks of age.
 - Preparation:
 - 2 parts distilled water
 - 1 part Fox Valley 32/40 powder
 - Add powder to very warm water, mix thoroughly with a wire whisk (do not blend!)
 - Label container with Formula type, date and your initials.
 - Keep refrigerated.
 - Formula is good for 3 days.

- FOX VALLEY 2:1C (25/30 FORMULA)
 - For neonate opossums up to about 45 grams or 2 weeks of age.
 - Preparation:
 - 2 parts distilled water
 - 1 part Fox Valley 32/40 powder
 - Add powder to very warm water, mix thoroughly with a wire whisk (do not blend!)
 - Label container with Formula type, date and your initials.
 - Keep refrigerated.
 - Formula is good for 3 days.

Feeding notes for Baby Opossums

- It is recommended that neonate opossums less than 30 grams be euthanized due to their immature digestive systems and our inability to reproduce maternal environment and nutrition.
- Animals that are depressed or excessively cold should be warmed before feeding. For non-neonates that are fully haired with developed skin (not transparent), slightly warmed fluids

(LRS, Norm-R, or 0.9% NaCl) may be given SQ to help expedite rehydration. Give 2.5% of body weight. Can repeat in 4-6hrs if necessary.

- Stimulate young opossums before feeding to produce feces and urine. A wet cotton ball or tissues should be used. Gently rub the genital area towards the tail.
 - Formula: Formula is mixed at a 2:1 ratio (WATER:FORMULA) and warmed to body temperature before feeding.
 - At intake, for opossums weighing less than 130 grams should receive the following initial tube feeding regimen:
 1. First feeding—Flavored Pedialyte (or other electrolyte fluid replacement liquid) at 5% of body weight.
 2. Second feeding—1/2 Pedialyte:1/2 Formula mixture
 3. Third (and subsequent) feedings – Formula
 - Opossums weighing less than 45 grams may not be able to feed themselves and may require feeding with a stomach tube. Use a nasogastric tube (#5FR X 38cm), passed directly into the stomach to feed warmed formula. The length of tube to introduce should measure from the tip of the nose to the last rib. See NWRA feeding procedure.
 - Provide a pouch and supplemental heat for opossums under 80 grams.
 - Single opossums may be more difficult to train to self-feed.
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Stage 1 Opossum Diet:

- Ingredients:
 - 2 tbl soaked kitten food
 - 1 tsp canned kitten/cat food
 - 1/2 tbl yogurt
 - 2 tsp egg w/out shell
 - 1 tbl chopped veg
 - 2 tsp chopped fruit
 - 1/2 sm. mouse OR 5 mealworms OR 1 tsp chopped fish OR 3 red wigglers
- Place all ingredients in a sturdy “tip-proof” bowl and mix well.
- Separate water dish available at all times.
- Any PM food remaining in the morning should be removed.

Stage 2 Opossum Diet:

- Ingredients:
 - 1/4 cup soaked kitten food
 - 1/4 egg chopped w/ shell on OR 1 whole raw quail egg (may have to crack it a bit until they get the hang of it)
 - 3 tbl chopped veg including native grasses (can pick these on the hillside near the aviaries, just below where we keep the octagons)
 - 2 tbl chopped fruit
 - 1 tbl chopped raw nuts
 - 1/2 lg mouse OR 1 sm mouse OR 1 whole small fish OR 10 mealworms
- Place all ingredients in a heavy “tip-proof” bowl and mix well.

- Use “Water Moats” to prevent ant problems. This involves placing the food dish on top of a plastic spacer and into an appropriate sized aluminum pie pan. Make sure the sides of the dish do not touch the side of the pan but close enough that the animal can reach the food without having to traverse the water moat
- Separate water dish available at all times.
- Young juveniles may still want formula/cereal bowl in AM. Refer to “CWC Formula book” in kitchen cabinet.
- Any PM food remaining in the morning should be removed.

Stage 3 Opossum Diet:

- Ingredients:
 - ¼ cup soaked dog food
 - 1 tsp. Canned dog food
 - 1 tbsp. Plain yogurt
 - ¼ chopped hard boiled egg (leave shell on)
 - ¼ cup chopped vegetables
 - 1/8 cup chopped fruit
 - 1 chopped up mouse OR 10 mealworms/earthworms
- Place all ingredients in a heavy “tip-proof” bowl and mix well.
- Use “Water Moats” to prevent ant problems. This involves placing the food dish on top of a plastic spacer and into an appropriate sized aluminum pie pan. Make sure the sides of the dish do not touch the side of the pan but close enough that the animal can reach the food without having to traverse the water moat
- Separate water dish available at all times.
- Young juveniles may still want formula/cereal bowl in AM. Refer to “CWC Formula book” in kitchen cabinet.
- Any PM food remaining in the morning should be removed.

Adult Opossum Diet

- Ingredients:
 - 2 tbsp canned dog food
 - ½ cup soaked dog food
 - 1 tbsp plain yogurt
 - ½ chopped hard boiled egg (leave shell on)
 - ½ cup chopped vegetables
 - ¼ cup chopped fruit
 - 1 chopped up mouse OR 10 mealworms/earthworms
- Place all ingredients in a heavy “tip-proof” bowl and mix well.
- Use “Water Moats” to prevent ant problems. This involves placing the food dish on top of a plastic spacer and into an appropriate sized aluminum pie pan. Make sure the sides of the dish do not touch the side of the pan but close enough that the animal can reach the food without having to traverse the water moat
- Separate water dish available at all times.
- Young juveniles may still want formula/cereal bowl in AM. Refer to “CWC Formula book” in kitchen cabinet.
- Any PM food remaining in the morning should be removed.