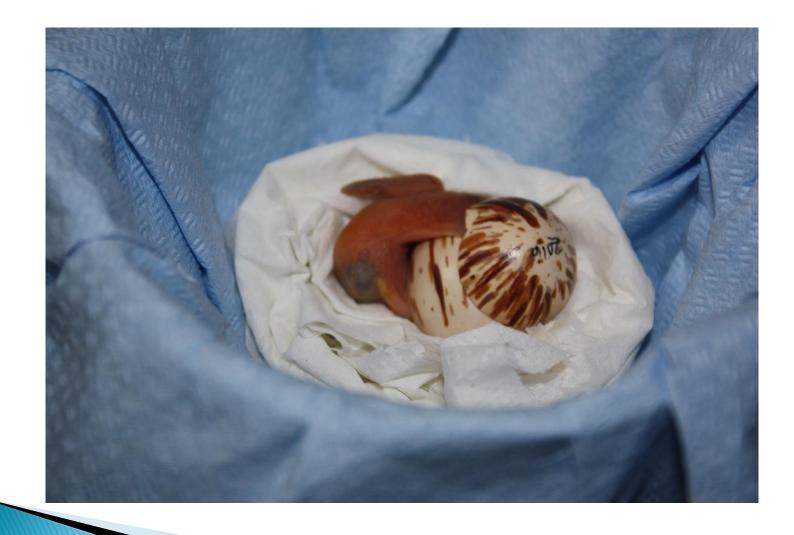
Hand-rearing Passerines



Christopher Leon San Diego Zoo Avian Propagation Center

Hatching



Brooders

- Usually start around 95 Degrees F
 - Decrease about one degree per day
 - Check for signs of chick being too hot or cold
- Water pans for humidity
- Sick chicks should be in brooders





Nest tub options



Food, Feeding Techniques and Frequencies



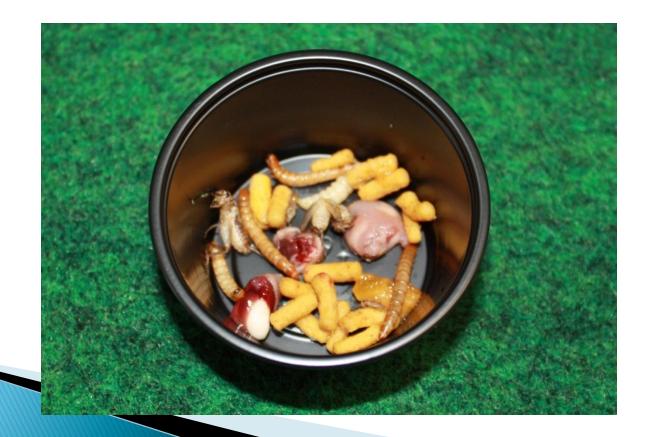
Food: Gruel

- Most passerines are fed a blended mixture of
 - Carnivore meat
 - Pinkies
 - Crickets
 - Waxworms
 - Calcium
 - Water



Food: Bugs

Bugs are not nutritionally complete, so any bird being offered bugs should be supplemented with soaked kibble, formula or soaked pellet for birds



Feed Techniques: Syringe and forceps









Reduce Imprinting







Frequencies

- Start out every 60–90 minutes
 - This is due to chicks only being able to take in small amounts of food at each feed
- Because sizes & ages of nestlings vary, the times between feedings & amounts of each feeding vary as well



DAY	TEM P	BROODER	FREQ.	DIET (By weight)	INTAKE	MISC.
	(EF)					
0	95	Nest cup w/ tissue AICU water pan for humidity 94.0E-96.0EF 80.0E-82.0EF wet bulb	1 1/2hr (9x)	Bottled drinking water 1st 2 feeds. Feed as mix: 60% Pinkie 40% small Crickets (3 week old) Use bottled drinking water to moisten food	30%	Supplement w/CaCO & Vitamin B- complex, GHOST when eyes open Move to brooder room ~4-6 hours post hatch
1	94				40%	
2	94	Add Nomad matting to nestcup			50%	Start sunning chick for 15 min./day
3	93				55%	
4	93		hrs $(7x)$	55% Pinkie 35% small Crickets (3 week old) Add 10% chopped papaya	minus 10% as transition to 7x	Skin pigment turns dark in Raggiana
5					55%	
6	92					
7	92			Change from pinkies to fuzzies50%Fuzzie30%small Crickets (3 week old)20%chopped papaya		Change from CaCO to DiCal
8	91					
9	91		Every 3 hrs (5x)			
10	90			Add 5% soaked Mazuri Zulife Soft-billDiet (low iron pellets)45%Fuzzie30%small Crickets (3 week old)20%chopped papaya		Delete Vitamin B-complex

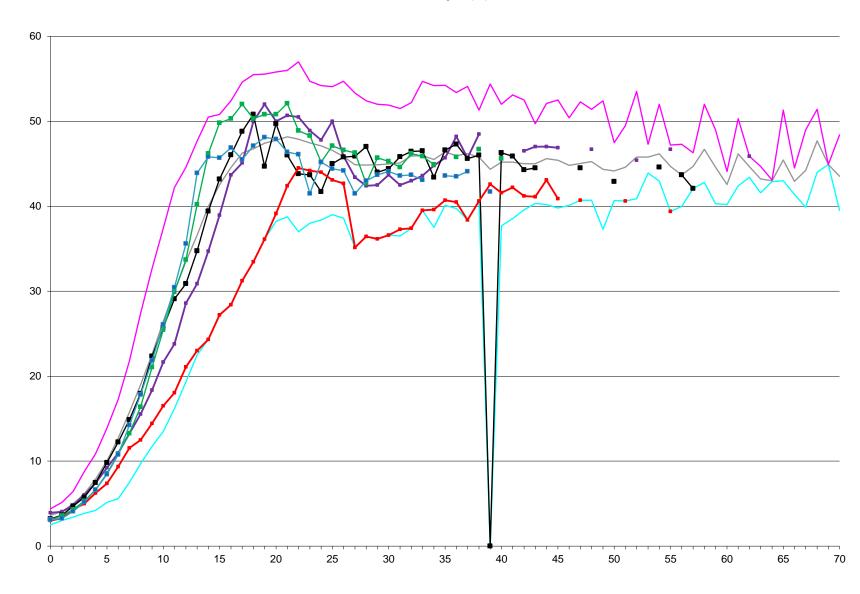
Weight Gains

Most passerines gain 20-25% in bodyweight daily for the first 2 weeks of life

 Poor weight gains or losses may indicate calories are being used to fight an illness

Most chicks eat 60-75% body weight per day

Grosbeak Starling Chick Growth Curves Hi-Avg-Lo (70)

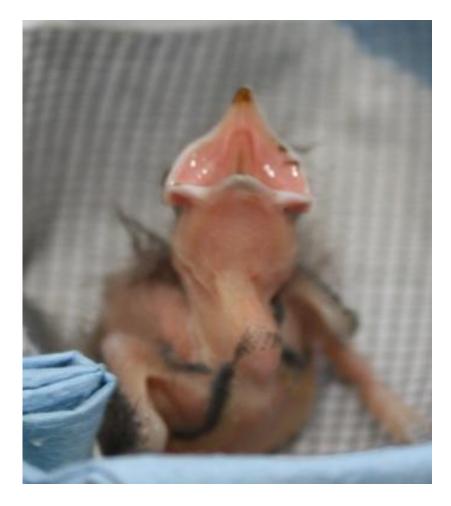


Weight (grams)

Age (days)

Signs of Problems

- Weight loss
- No feeding response
- Distended abdomen
- Squinty, swollen, crusty eyes
- Runny or dry feces
- Abnormal behavior
- Pasty vent
- Pale mouth



Hydration: Well hydrated



Dehydrated





Nutrition





Fed improper diet and overly handled Fed a good diet and overly handled Poor plumage Bright vibrant plumage Pale gape Bright yellow gape Dull eyes Glistening alert eyes

Natural Daylight and UV light

- Most birds need a minimum of 15 minutes of UV light daily to produce vitamin D in order to absorb Calcium
 - Do not leave chicks unattended if they are unable to move themselves to cooler areas
 - Full spectrum lights also help, birds must be very close to light



Fledging



Weaning

- Once fledged, chicks receive a food pan TID and a water pan
- Offer pans with live insects to attract chicks to movement
- Place chick in food pan and offer food from the food pan
- Dripping water into water bowl

Once self feeding

- Chicks will continue to beg if you feed them
- Continue to weigh daily
- Reduce amount of food pans
- Move after 10 days of self feeding



Questions?

