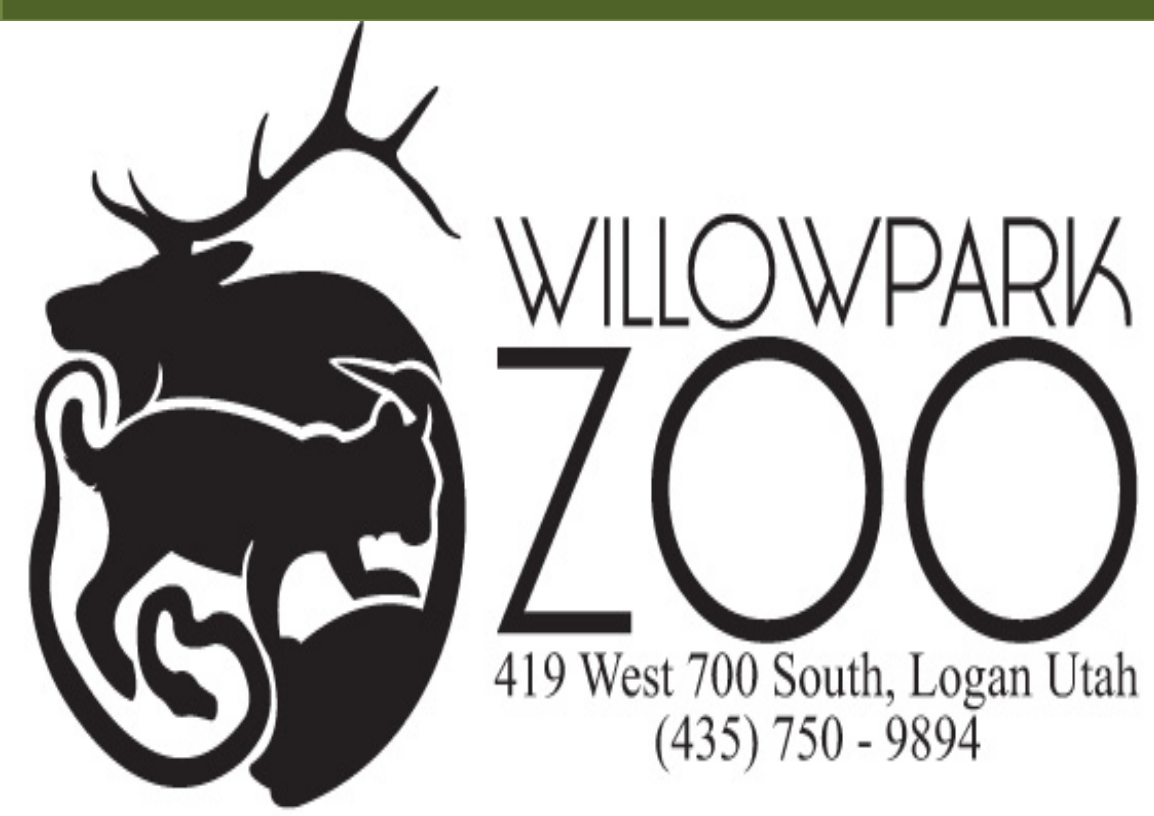


Bird Husbandry Procedures at Willow Park Zoo



Jennica Blasi, Utah State Biology Undergraduate

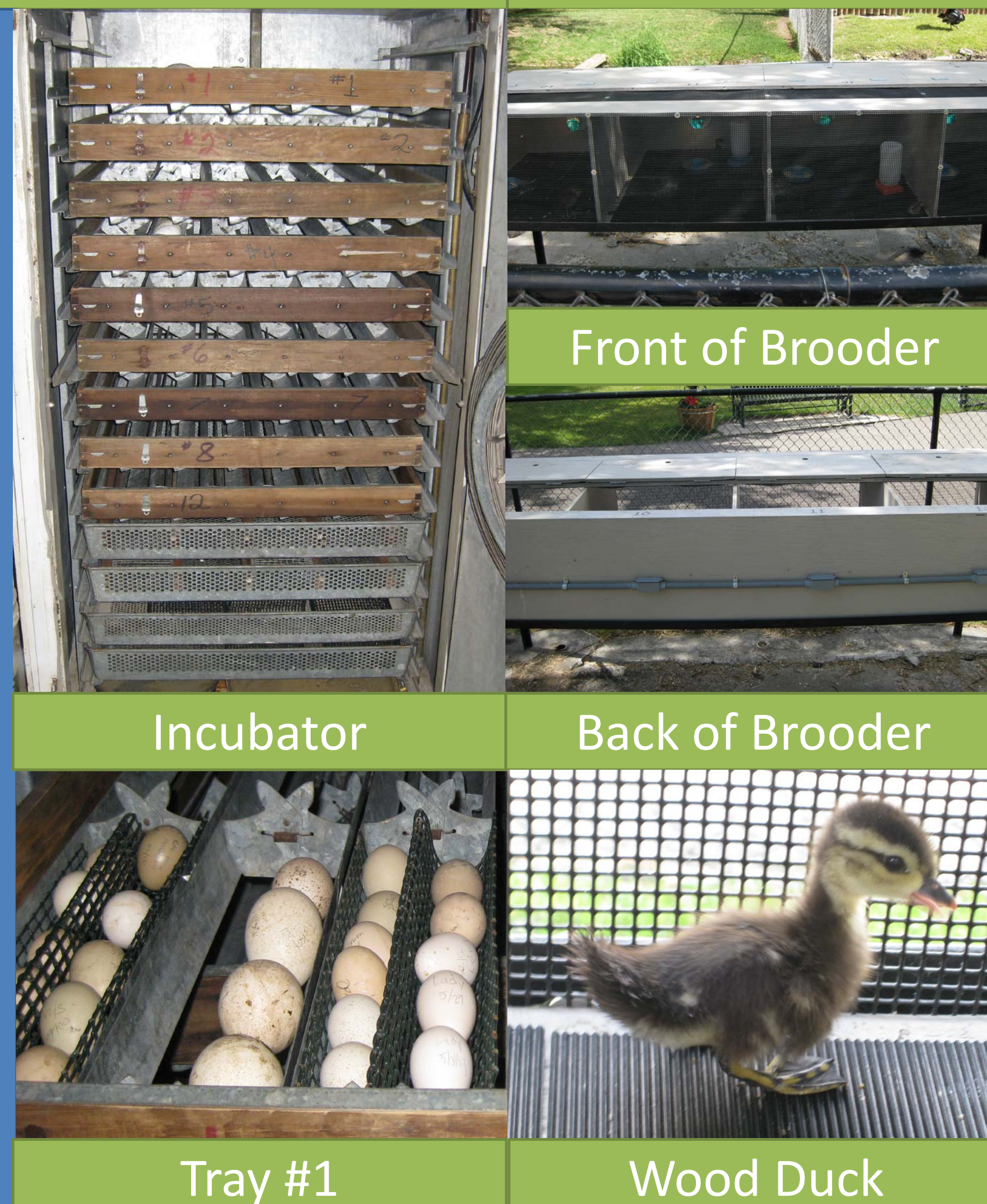
Dr. Kimberly Sullivan, Utah State University Internship Supervisor

Troy Cooper, Willow Park Zoo Director



Introduction to Internship Research

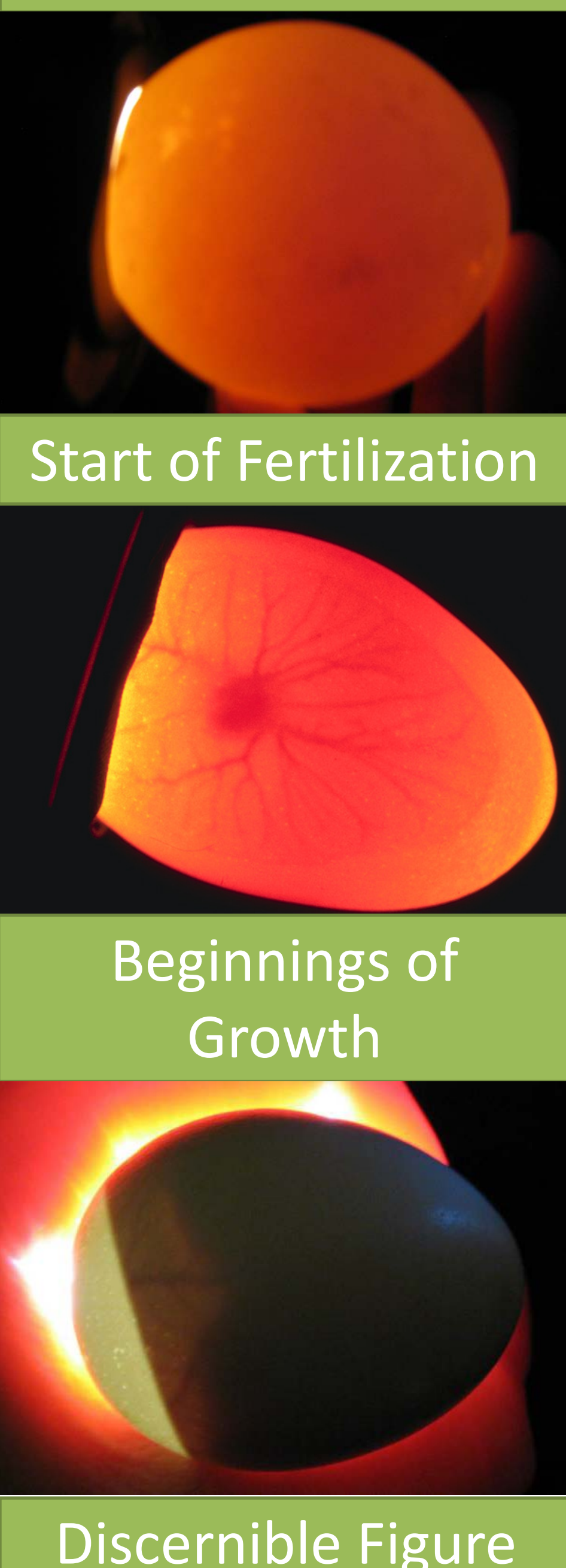
- Eggs were gathered from ten different species of birds.
- Eggs were incubated based on research on incubation period.
- Embryo development was monitored through frequent candling.
- After hatching, the hatchlings are confined to brooders to allow for safe and healthy development.
- Lastly they are placed out on exhibit during the day to help acclimate them to the surroundings.



Research Results

- **Problems**
 - Two species of birds are not fertilizing the eggs
 - The males of two species of birds are destroying the eggs prior to picking them up.
- **Successes/Births**
 - One Wood Duck and one Cackling Gosling were hatched by natural incubation
 - Two Golden Pheasant chicks and one Chukar Partridge chick were hatched through artificial incubation.

Developed Hatching Protocol



- **Incubation**
 - Fully cataloging eggs for better monitoring.
 - New thermometer and wet bulb
 - Using the incubators self rotating mechanism.
 - Switching to lower temperature/higher humidity incubator near hatching time
- **After Hatching**
 - New heater bulbs (100 Watts)
 - Pheasants in dry brooder/ Ducks in wet brooder
 - Fresh water and chick feed at all times

Recommendations

- **Incubation**
 - Continue to catalog egg species and date acquired in log book.
 - Initial incubator needs kept at 99.5°F and 55% humidity.
 - Electrician needs to fix the incubators turning mechanism.
 - Secondary Incubator should be used within two days of hatching.
 - Secondary incubator kept at 97°F and 75% humidity.
 - Needs to be added to daily feeding/chore regimen



References:

- Bush, Donna. "Pheasant Ridge." *Avian Genetics*. Web. <http://www.aviangenetics.com/Pheasant_Ridge/>.
- D. David Frame. "Willow Park Zoo Hatchling Project." Message to the author. 10-24 June 2013. E-mail.

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