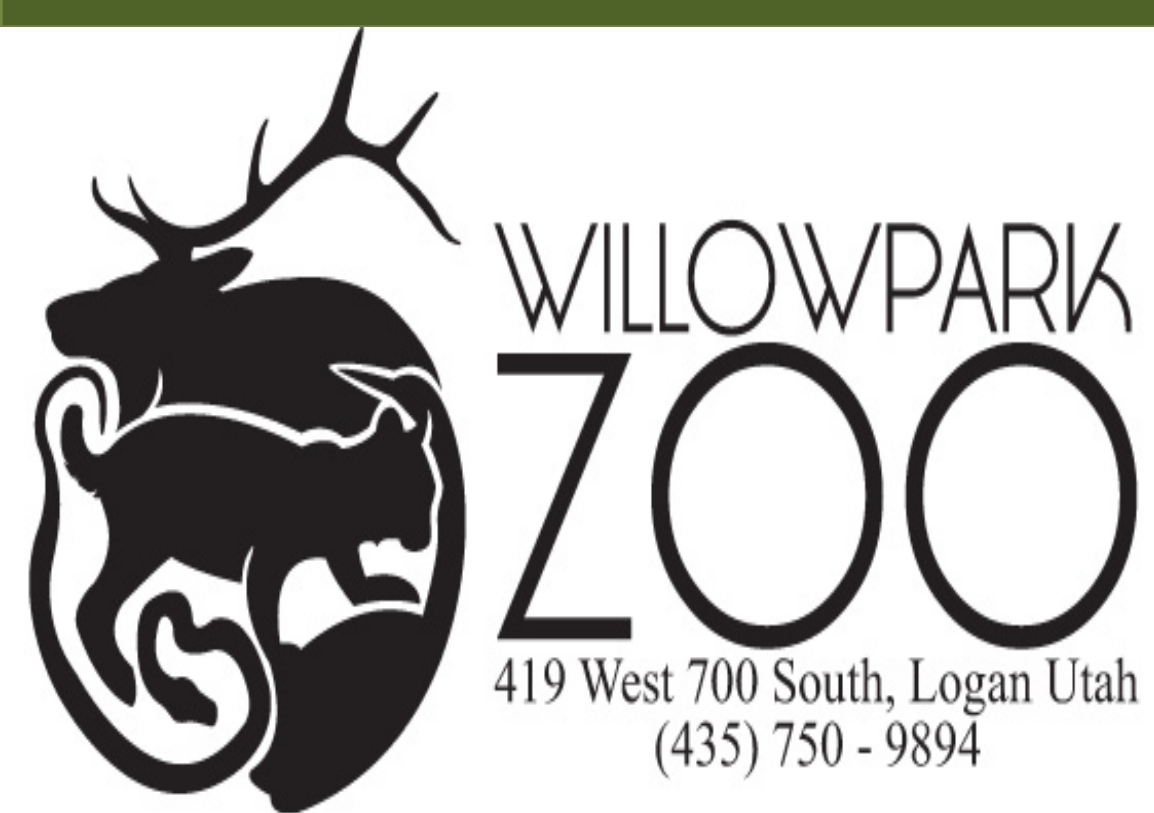


# Bird Husbandry Procedures at Willow Park Zoo



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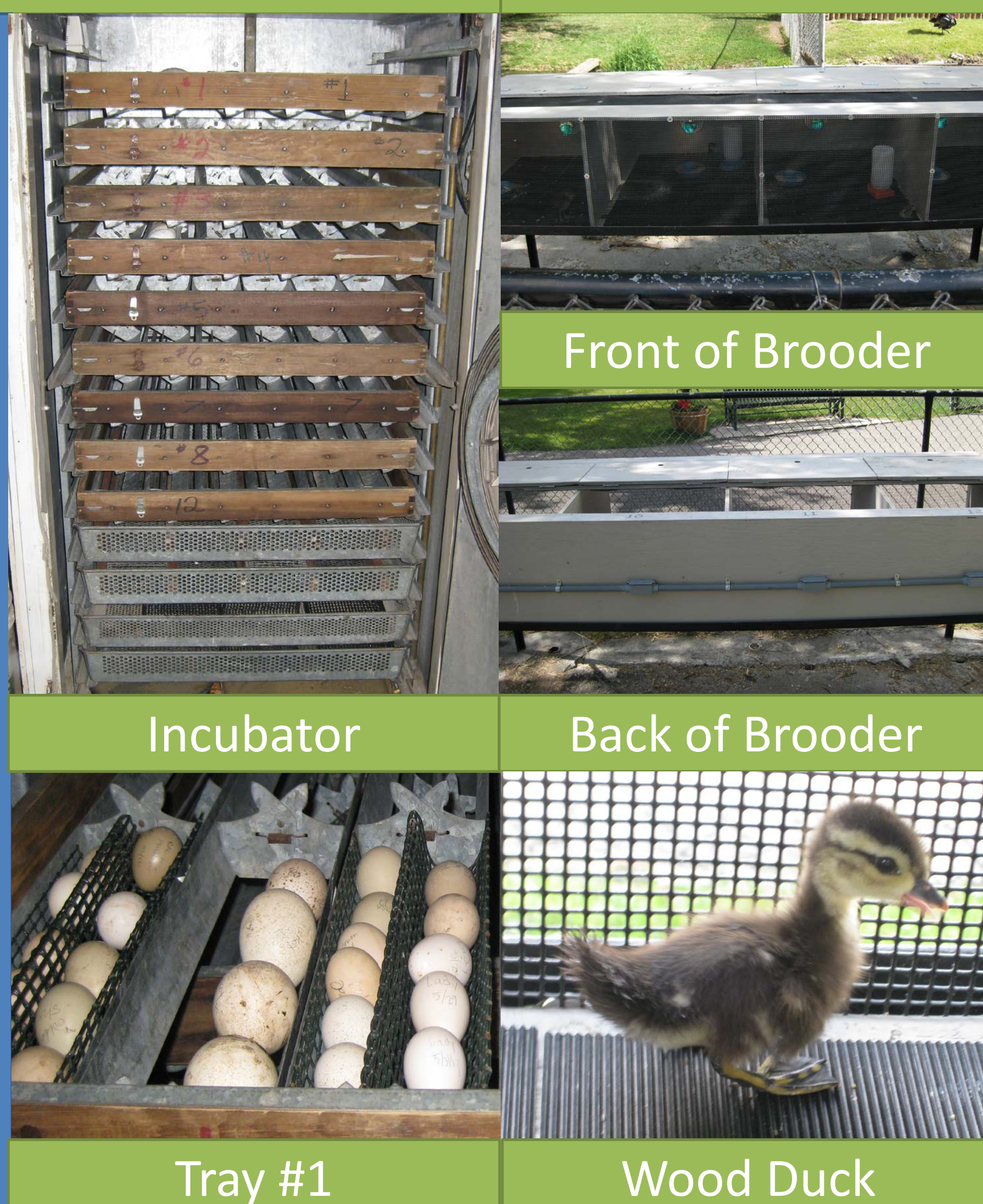
Dr. Kimberly Sullivan, Utah State University Internship Supervisor

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/](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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