

## Hatchery/Breeder Programs at The University of Arkansas

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- Re-evaluating hatching egg storage conditions
    - Genetic selection has drastically changed the makeup of modern breeders
    - Most store eggs on the farm at about 68 F or less when cooler temperatures are unnecessary
    - Eggs stored too cool are subject to increased embryo viability during the incubation process
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### Hatching Egg Storage

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- Research is underway to develop a phased in on-farm egg storage program that changes with flock age
  - Preliminary on-farm trials have been positive in reducing embryo mortality and increasing hatch
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### Embryo Viability in Commercial Flocks

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- Variations in embryo viability between sister flocks with no fertility problems are becoming more common
  - On farm trials are underway to determine how water quality, water intake and delivery mechanisms may play a role in embryo viability
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### Embryo Viability in Commercial Flocks

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- Using sperm penetration values, incubation stress and critical embryodiagnosis embryo viability and livability is being evaluated
  - Further research will examine rearing management practices and the effects embryo viability
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### Male Management

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- A lot of attention has been placed on controlling male body weight throughout the life of the flock
  - Research is underway to evaluate phase feeding of breeder males to both control body weight and reduce the drop in late life hatchability
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