

FFA Poultry Science Curriculum
Chapter 6 – Hatchery Management
Learning Objectives

1. Describe the role of the breeder farm in hatchery management, and discuss role of farm and hatchery in fertile egg production.
 2. Discuss appropriate environmental conditions for the following: Egg storage, incubators, hatchers.
 3. Discuss the roll of embryonic membranes in fertile eggs.
 4. Discuss egg rotation, including why is it critical in the setter and not the hatcher?
2. Calculations:

	Incubator 1
Initial number of eggs set	70,000
Average initial weight per egg	60 g
Average weight at transfer per egg	52 g
# of eggs candled on day 10	200
# bloods on day 10	3
# infertile eggs on day 10	12
# hatched at end of incubation	58,500

	Incubator 1
Average % moisture loss	
% true fertility	
% early dead (periods I/II mortality)	
% mid/late dead (periods III/IV mortality)	
% hatchability of all eggs set	
% hatchability of fertile eggs	
Point spread	

The hatchery is responsible for hatching half of the birds for a complex that raises 54,750,000 birds per year.
 A. How many eggs would have to be set in a year to supply the complex with enough chicks for the year?

- B. If the average broiler breeder farm in the complex has 10,000 hens that each produce 165 eggs in a 70-week laying cycle, how many farms would be needed to supply hatching eggs for this complex every year? (Hint: you need to adjust the egg production value for a year instead of the 70-week cycle).