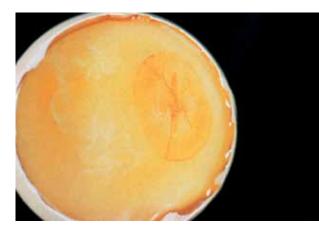


CHICKEN EMBRYO DEVELOPMENT



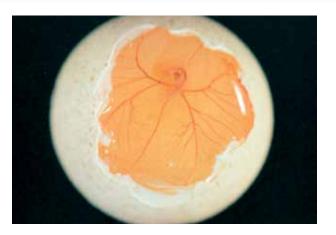


ONE Nervous system begins to develop.

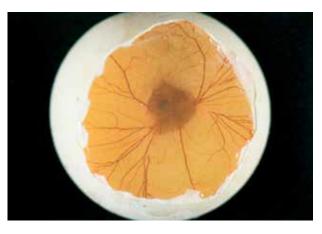


TWO

Blood islands, heart and blood vessels develop.



THREE Embryo turns on left side, limb buds begin.



FOUR

Digestive system begins to develop. Note dark pigment in eye.





FIVE

Reproductive system development begins. First presence of cartilage.





SIX Development of beak.



SEVEN Egg tooth, comb and digits appear.



EIGHT Feather tracts appear.







NINE

Formation of feathers begins.

TEN

Hardening of beak; digits separate.

ELEVEN

Eyelids grow over eye.

TWELVE

Down feathers and toenails appear.

THIRTEEN

Cartilage skeleton is complete; scales are clearly visible on legs.



FOURTEEN

More chick-like appearance—forming/turning of egg no longer necessary.



FIFTEEN Rapid growth.



SIXTEEN Continued rapid growth.



SEVENTEEN

Embryo starts positioning head toward large end of egg.



EIGHTEEN

Head of embryo should be under right wing and beak toward air cell.



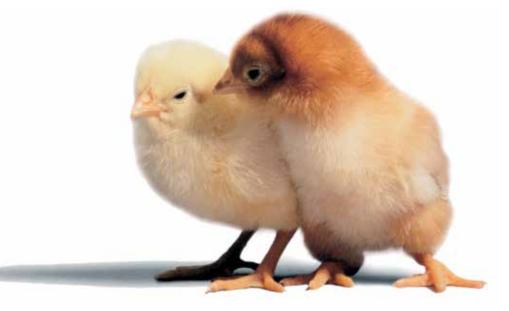
NINETEEN Chick pips through air cell and pulmonary respiration begins.



TWENTY Embryo starts pipping shell.



TWENTY-ONE Hatching of chick.



Embryo preparation, photos and text by Dr. Gayner McDaniel, Poultry Science Department, Auburn University, Auburn, Alabama 36849