

# Determination of Sex and Age in Northern Bobwhite (*Colinus virginianus*)



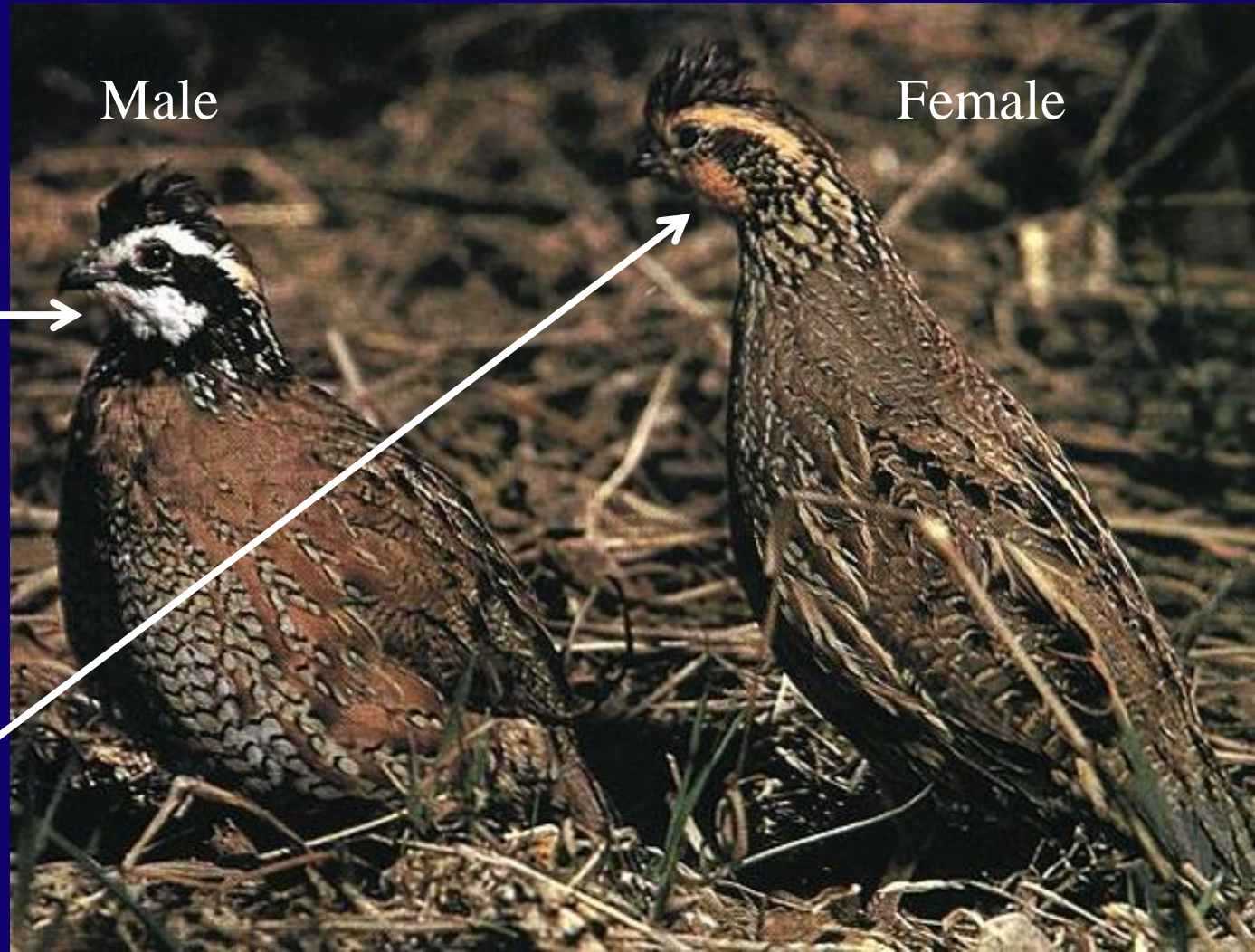
# Determination of Sex

## Males

White throat  
patch

## Females

Buff-colored  
throat patch



# Determination of Age

The technique for aging quail is by the coloration of the primary covert feathers and the sequential molting and replacement of primary feathers of their wings.

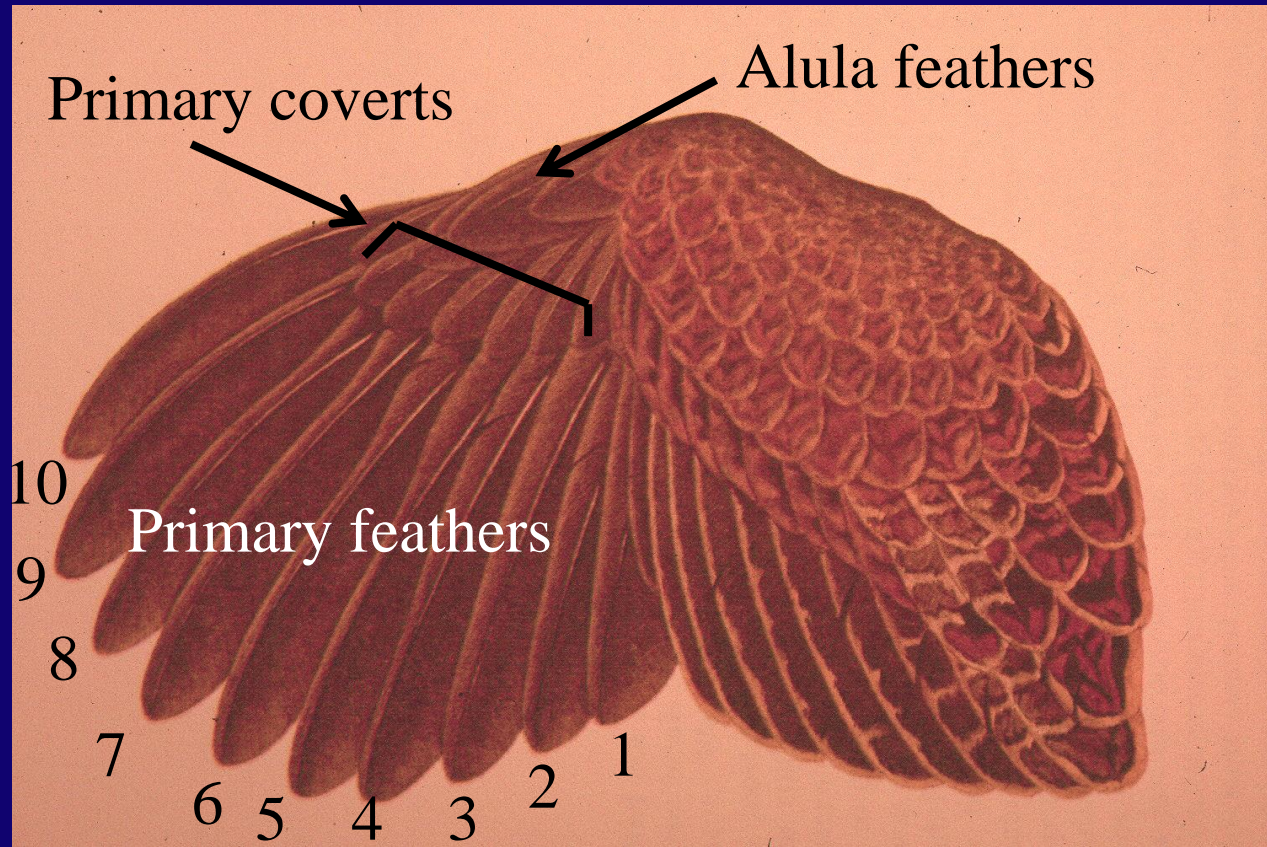
Buff-tipped primary coverts indicate the bird is a juvenile. Absence of buff-tipped primary coverts indicates an adult bird.



# Determination of Age

## Wing Nomenclature

The primaries (flight feathers) are numbered from 10 to 1 starting from the outside and counting in.

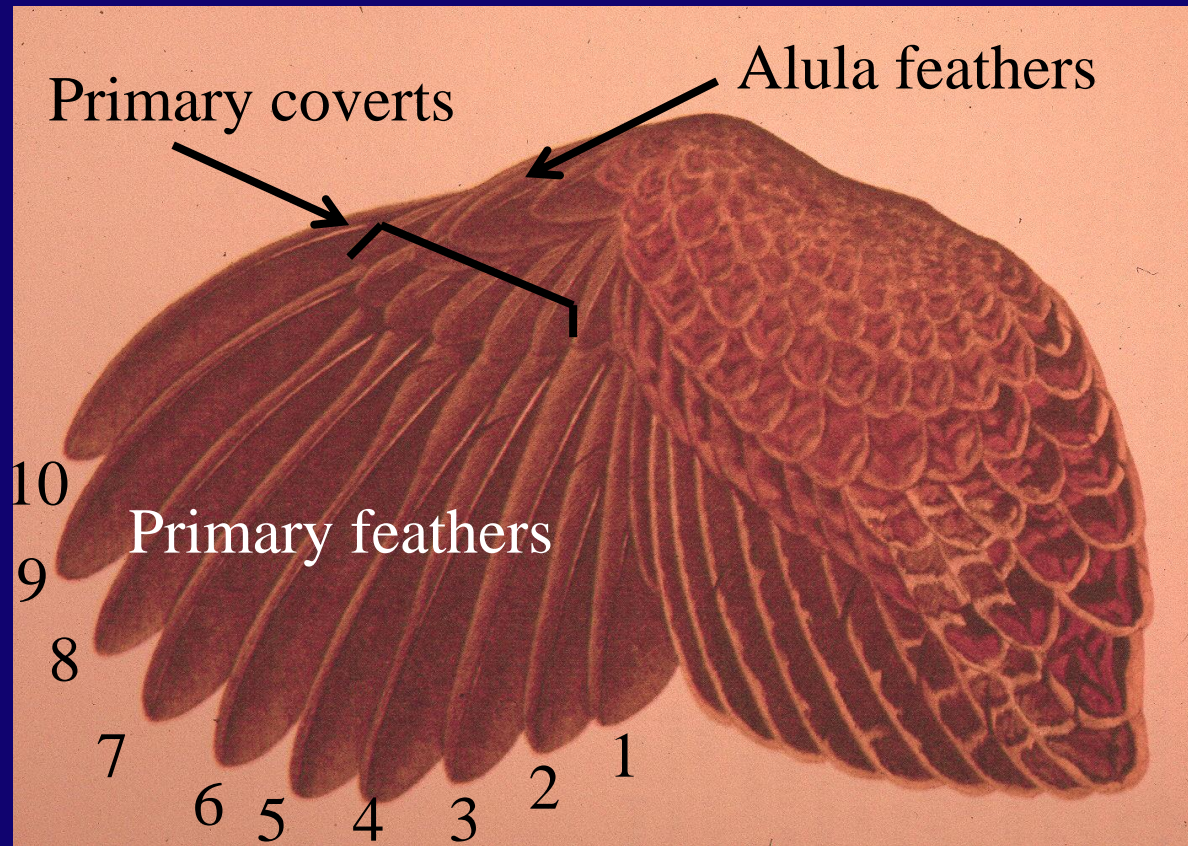




# Determination of Age

## Wing Nomenclature

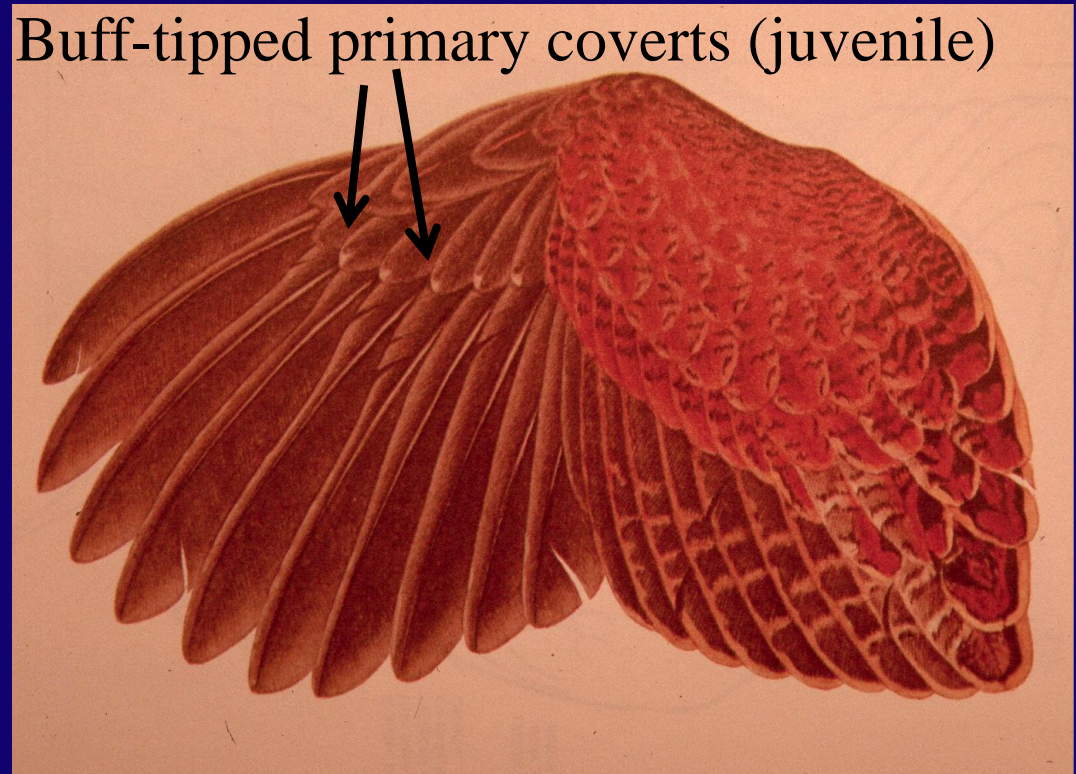
The primaries are molted and replaced starting with primary number 1. Primaries #9 & #10 are not molted until the bird is an adult.



# Determination of Age

## Juvenile

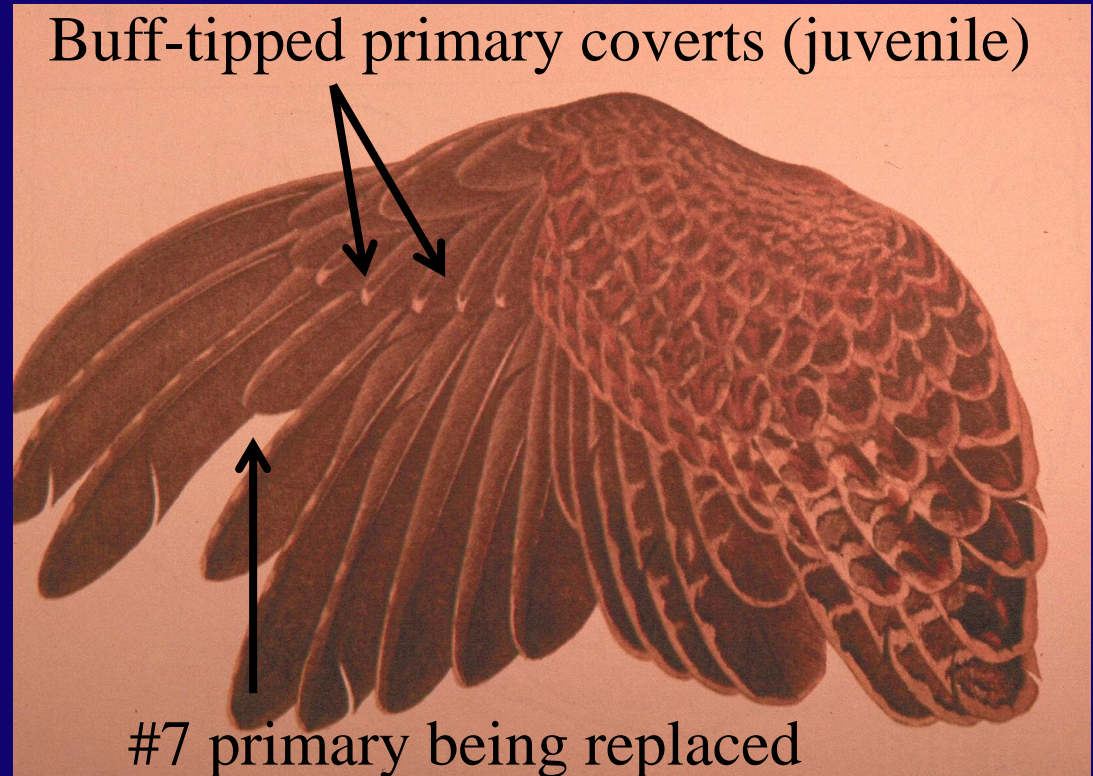
Buff-colored tips of the primary coverts reveal that this bird is a juvenile





# Determination of Age

After determining that this is a juvenile, we may be able to age the bird in days depending on the molting and replacement of the primary feathers



By looking at the table on the next slide, we determine that the #7 primary is about  $\frac{1}{4}$  grown. Therefore, this bird is approximately 83 days old.

# Determination of Age of Juvenile Quail by Primary Feather Molt and Replacement

Primary #	1	2	3	4	5	6	7	8
Dropped or growth begins	28	35	42	47	54	62	74	101
$\frac{1}{4}$ Grown	33	42	47	53	60	68	83	111
$\frac{1}{2}$ Grown	41	47	51	57	65	74	93	119
$\frac{3}{4}$ Grown	45	52	56	62	73	82	105	127
Fully Grown	53	56	62	76	85	103	124	150

This table will be provided for aging juvenile quail by number of days old



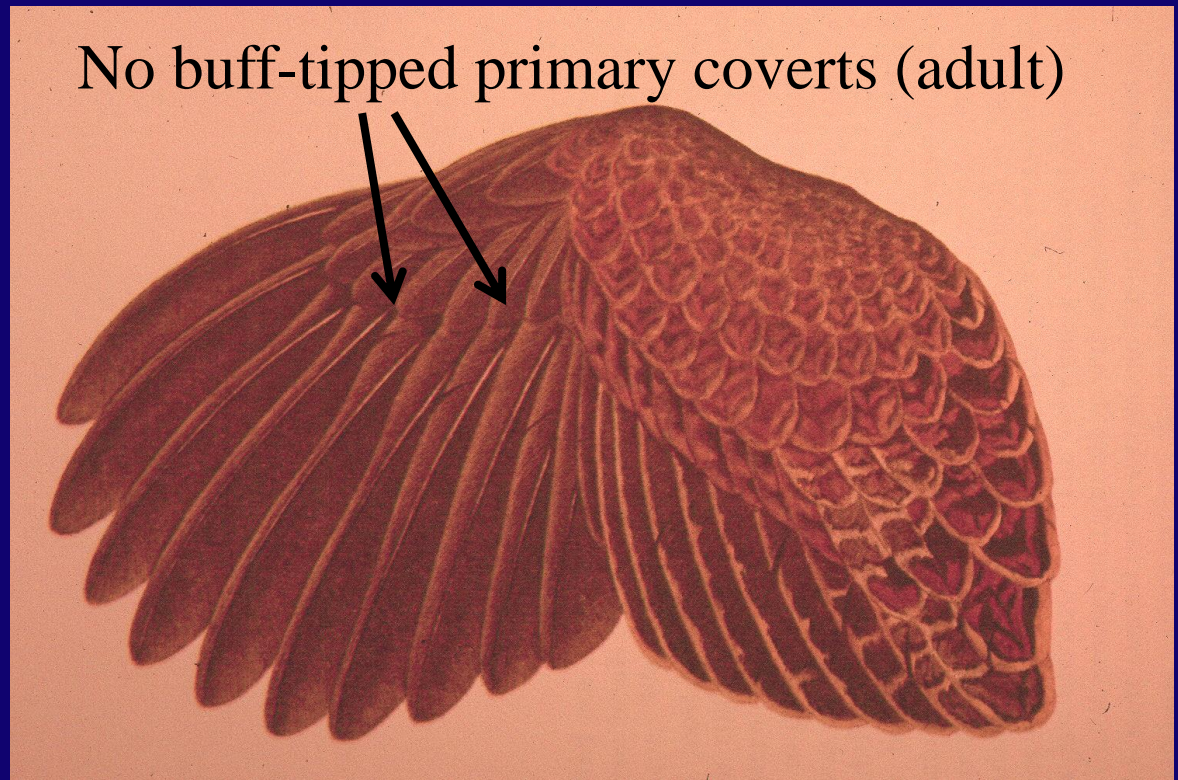
# Determination of Age of Juvenile Quail by Primary Feather Molt and Replacement

Juvenile birds that have molted and replaced all 8 primaries are generally considered as “juveniles greater than 150 days old” when asked to give the age of a quail in days.

# Determination of Age

## Adult

The absence of buff-tipped coverts reveal that this bird is an adult

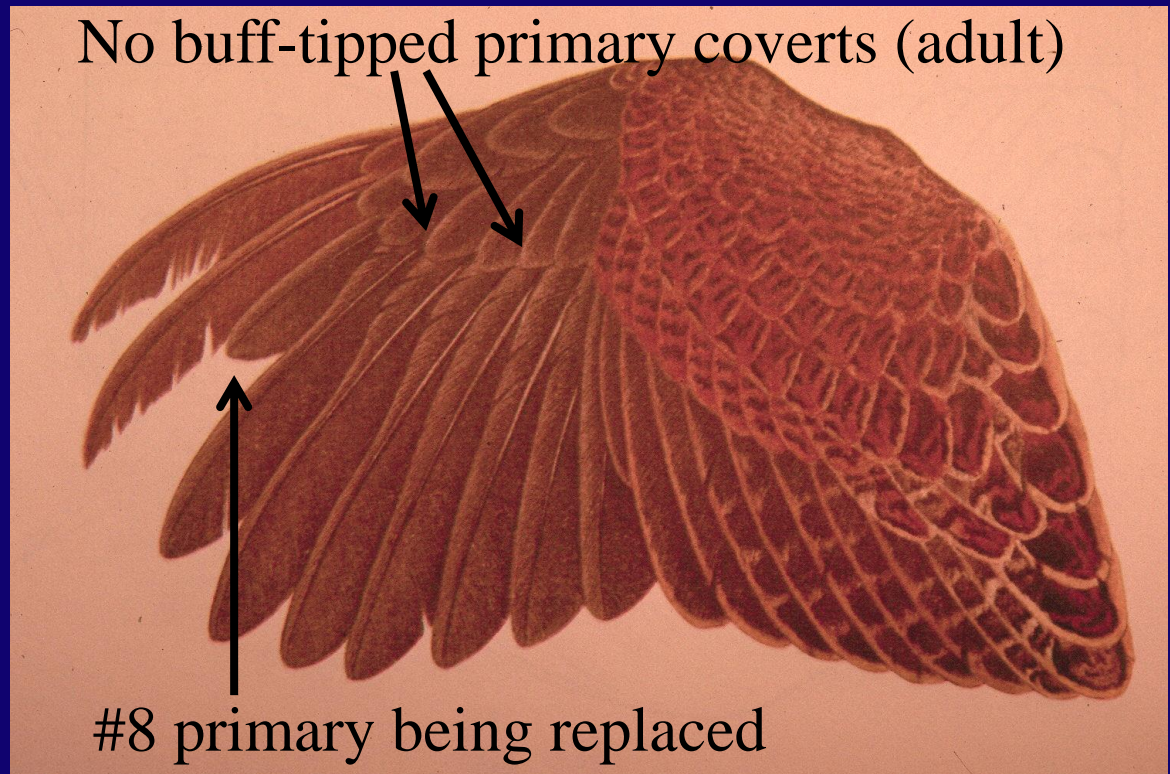




# Determination of Age

## Adult

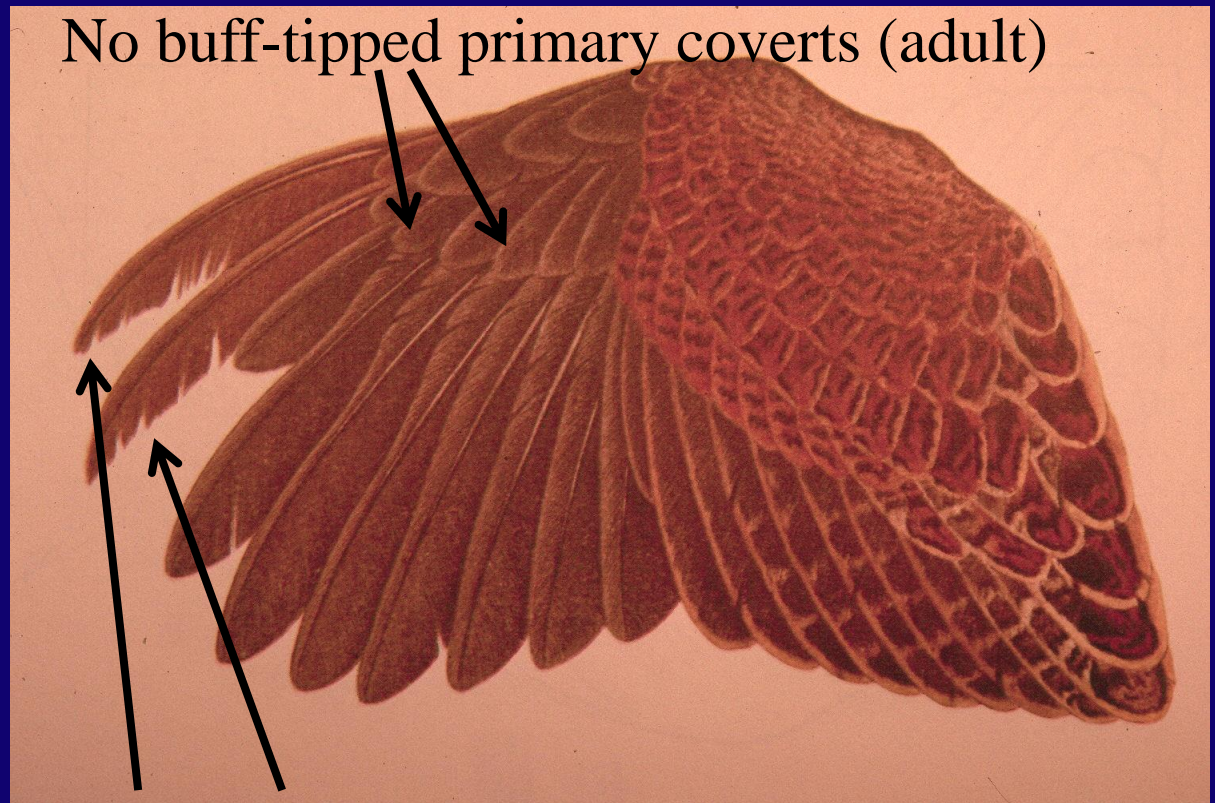
The absence of buff-tipped coverts reveal that this bird is an adult even though the #8 primary is being replaced



# Determination of Age

## Adult

An adult bird also molts and replaces their primary feathers. Note the absence of buff-tipped coverts before assuming it's a juvenile.



#10 & #9 primaries are first molted as an adult during the second fall of life (note ragged appearance indicating old, worn feathers)