# **MAPS BANDING CODES - 2016**

### **Skull Pneumaticization**

- 0 None; single pinkish layer.
- 1 Trace at very back of skull; 1-5% of total area.
- 2 6-33% at back; distinct contrast; whitish dots.
- 3 34-66%; rear half and some of front, midline, and sides.
- 4 67-94%; two oval red spots either side of cranium rest completed.
- 5 95-99%; two tiny pinkish spots. (Some birds stay at class 5.)
- 6 Complete, fully pneumaticized.
- 8 Skull examined but degree of pneumaticization not determinable.

#### **Cloacal Protuberance**

- 0 Cloaca not enlarged.
- 1 Small (conical; wide at base, narrow at tip.)
- 2 Medium (cylindrical; as large at tip as at base.)
- 3 Large (bulbous; larger at tip than at base.)

#### **Brood Patch**

- 0 None present, breast feathered.
- Feathers dropped, skin smooth and dark red; some vascularization.
- 2 Skin vascularized and wrinkled, fluid present.
- 3 Vascularization extreme, skin wrinkled, much fluid.
- Wrinkled skin, thin and dry; vascularization and fluid mostly gone.
- Vascularization, fluid, and wrinkles gone; pinfeathers appearing.

#### Fat

- 0 No fat anywhere.
- 1 Furcular hollow less than 5% full.
- 2 Furcular hollow 5-33% full.
- 3 Furcular hollow about half full (34%-66%).
- 4 Furcular hollow full, 67%-100%, fat thick in wingpits and on abdomen
- 5 Fat bulging above furcular hollow, in wingpits, and on abdomen.
- 6 Fat greatly bulging in all areas.
- 7 Excessive; fat nearly joined from all areas.

### **Body Molt**

- 0 None.
- 1 Trace; a few feathers anywhere on body.
- 2 Light; a number from any individual tract.
- 3 Medium; a number from several tracts or most of head.
- 4 Heavy; more than half from most tracts; more than 3/3 of body.

# Flight-feather Molt

(primaries, secondaries, & tail)

Most species do not molt juvenal flight-feathers. Check Pyle 1997 for each species. The code "S" essentially means "flight-feather molt occurring" - It may not always be exactly symmetrical

- N None.
- A Adventitious, accidental, asymmetric.
- S Full, normal symmetric molt.
- J Growth of juvenal (1st-generation) flight feathers.

### Flight-feather Wear

(outer four primaries; not rectrices)

- 0 None; light feather edges remain.
- 1 Very slight edge wear; no fraying or nicks.
- 2 Slight; definitely worn but very little fraying, very few nicks.
- 3 Moderate; definite fraying and nicks; chips along vanes.
- 4 Heavy; feathers worn and frayed, tips missing.
- 5 Excessive; extreme wear, shafts exposed beyond vanes, tips broken off

# **Juvenal Body Plumage**

(include body feathers only; not wing feathers)

- 3 Juvenal plumage growing in or full.
- 2 In preformative molt; more than half of juvenal plumage remains.
- 1 In preformative molt; less than half of juvenal plumage remains.
- 0 None; no juvenal plumage remaining.

# **Molt Limits & Plumage**

Unless a tract is <u>completely</u> composed of alternate feathers, alternate feathers in a tract are ignored.

- J Juvenal; feather tract comprised entirely of retained juvenal feathers or non-feathered body part shows characteristics indicative of a young bird
- L Molt limit; molt limit between juvenal and formative feathers
- F Formative; feather tract comprised entirely of formative feathers
- B Basic; feather tract entirely of basic feathers or non-feathered body part shows characteristics indicative of an adult bird
- R- retained; both juvenal and basic feathers are present within the tract (typically with woodpeckers only)
- M Mixed; multiple generations of basic feathers are present in the tract (typically with woodpeckers only)
- A Alternate; ALL feathers in the tract are of alternate plumage
- N definitely not juvenal feathers, but whether or not they are formative or basic feathers cannot be determined with confidence.
- U Unknown; feather tract or non-feathered body part examined, but shows ambiguous characteristics or cannot be coded with confidence

## **Status** (more status codes online at BBL website)

- 300 Normal, healthy, banded bird.
- 301 Healthy, color-banded bird.
- 325-Radiotag/GPS, healthy, banded bird.
- 500 Banded but injured or diseased.
- 700 Held over 24 hours for observation or rehabilitation.
- 000 Unbanded or dead.

#### **Disposition**

- M Malformed (deformity such as crossed mandibles).
- O Old (healed) injury. W Wing injury.
  - Ill (diseased). B Body injury.
  - Stress or shock. L Leg injury.
- E Eye injury.
  T Tongue injury.
  P Predator-caused mortality.
  D Dead (or permanently removed).

# **Feather Pull**

- O two Outer rectrices
- I one Inner and one outer rectrix