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Identifying Wings of North American Grouse, Prairie Chickens, Pheasant, and Partridge

Identification Guides for Wildlife Law Enforcement No. 5

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Upland game birds must sometimes be identified by wildlife law enforcement personnel using intact wings on otherwise dressed carcasses. This Identification Guide illustrates the spread wings of the following middle-sized species: Ring-necked Pheasant (*Phasianus colchicus*), Blue Grouse (*Dendragapus obscurus*), Ruffed Grouse (*Bonasa umbellus*), Spruce Grouse (*Falcapennis canadensis*), Sharp-tailed Grouse (*Tympanuchus phasianellus*), Greater Prairie Chicken (*Tympanuchus cupido*), Lesser Prairie Chicken (*Tympanuchus pallidinicinctus*), and Gray (Hungarian) Partridge (*Perdix perdix*). The much larger Sage Grouse and Wild Turkey and the much smaller quail species are not included.

All photographs are printed at one-half natural size, with a six-inch ruler included for scale. For some similar species, particularly the Blue Grouse and Spruce Grouse, size is a useful character. In most cases, however, plumage pattern alone is diagnostic for species identification.

Definitions

Primaries: the outermost 10 flight feathers, attached to the “hand” of the bird

Secondaries: the inner flight feathers, attached to the “arm” of the bird

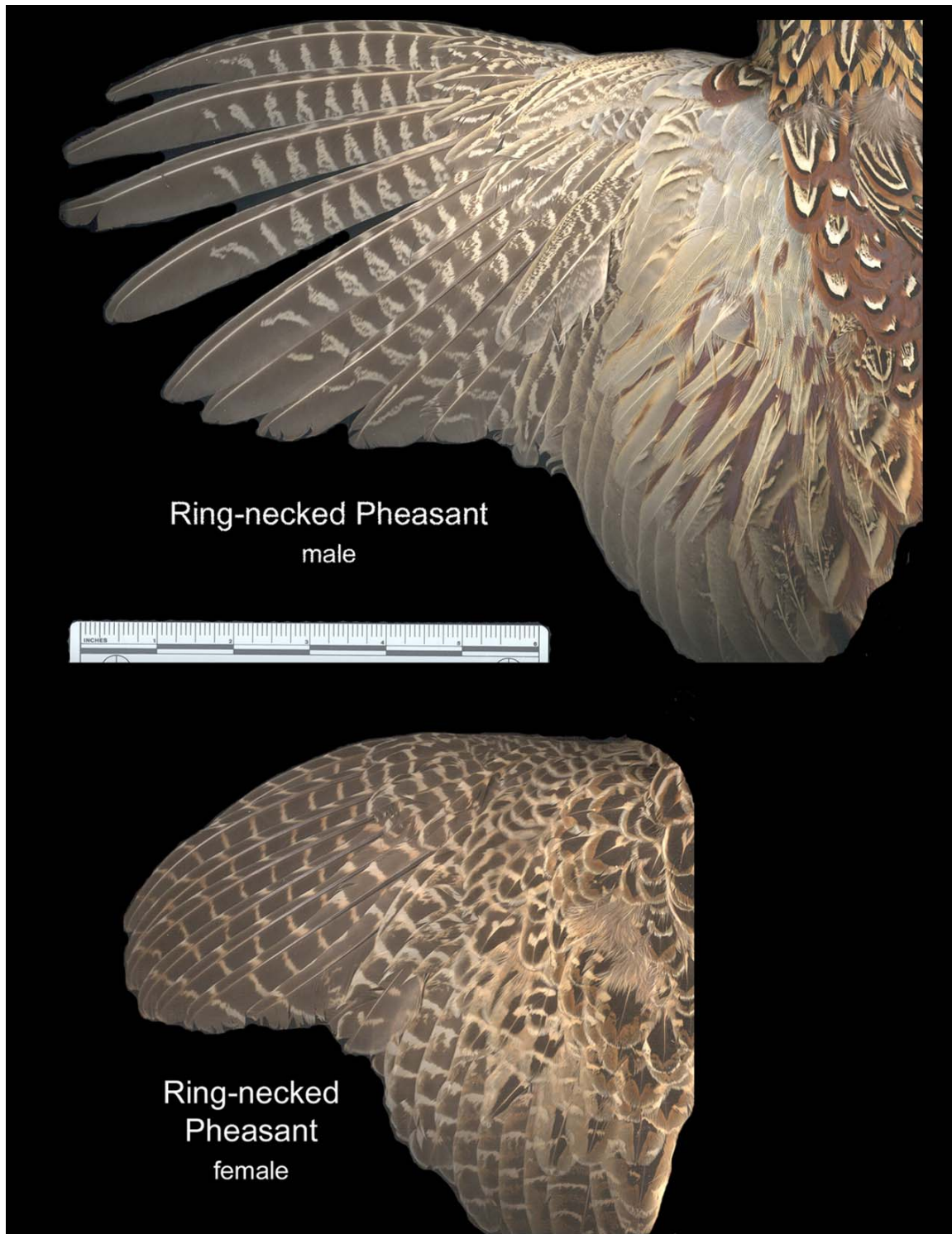
Coverts: the small feathers that cover the surface of the wing; primary coverts are at the base of the primaries, and secondary coverts are at the base of the secondaries

Anterior vane: the leading edge of the feather, on the outer side of the shaft

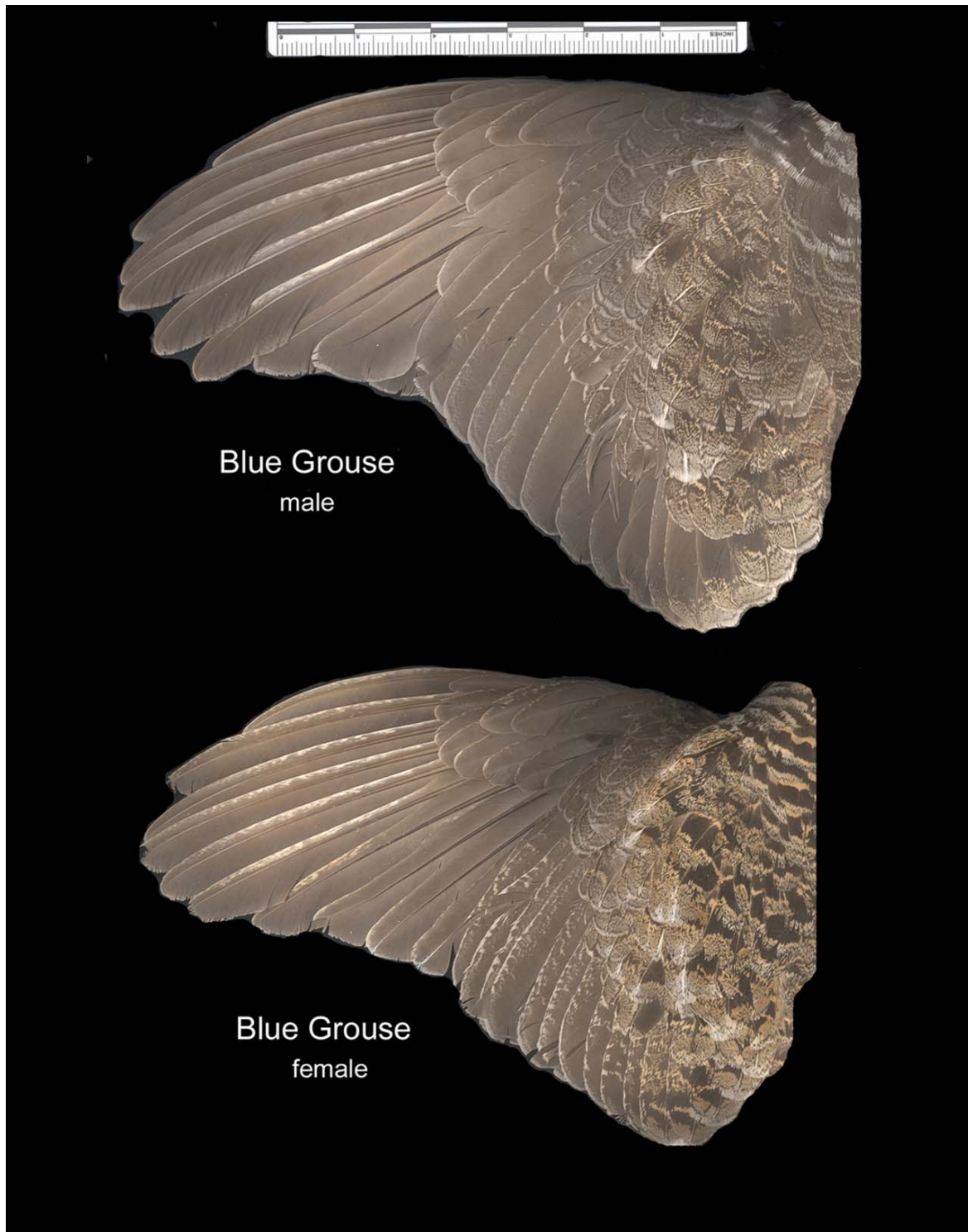
Posterior vane: the trailing edge of the feather, on the inner side of the shaft



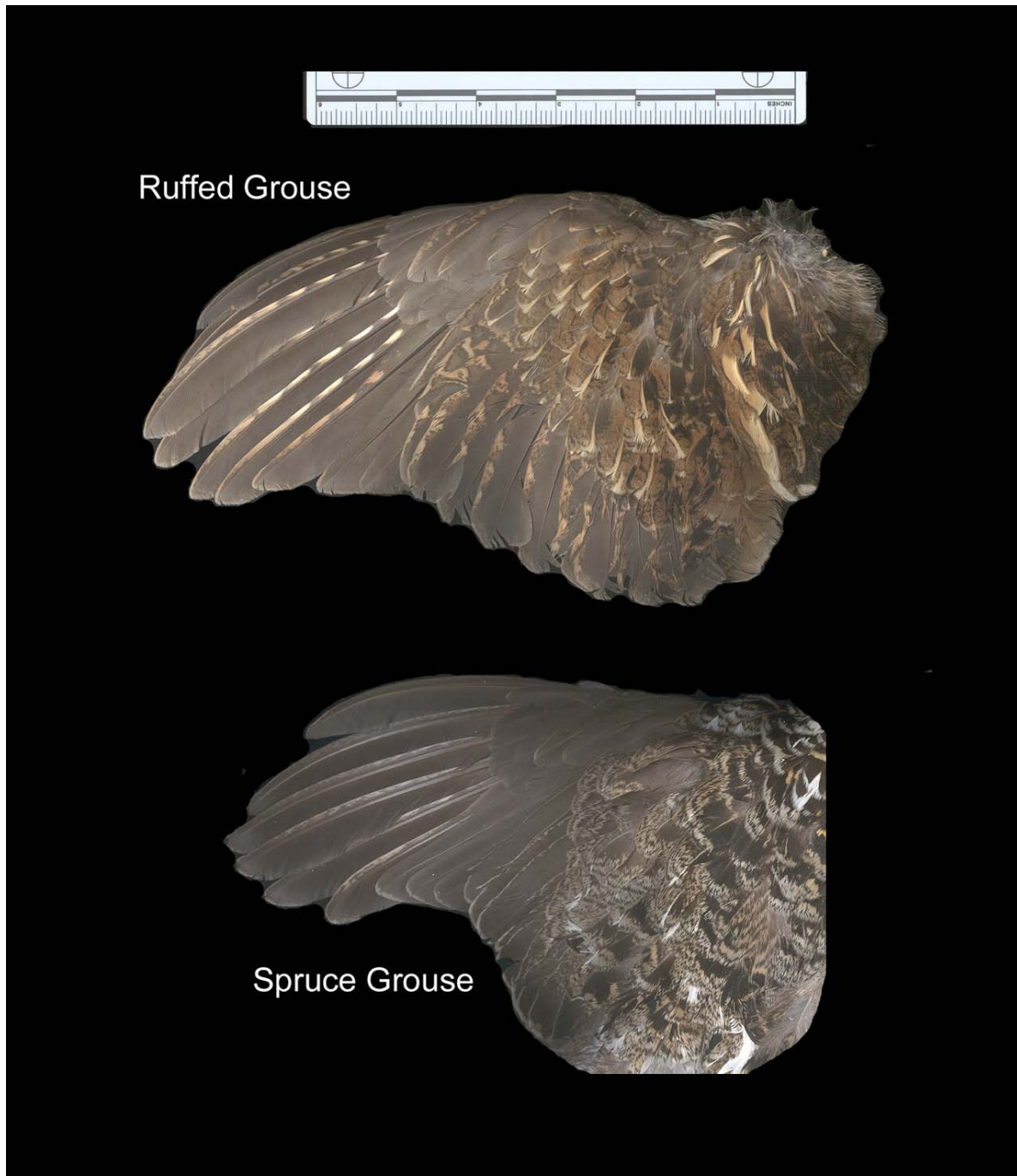
Examples of feather patterns described in the text.



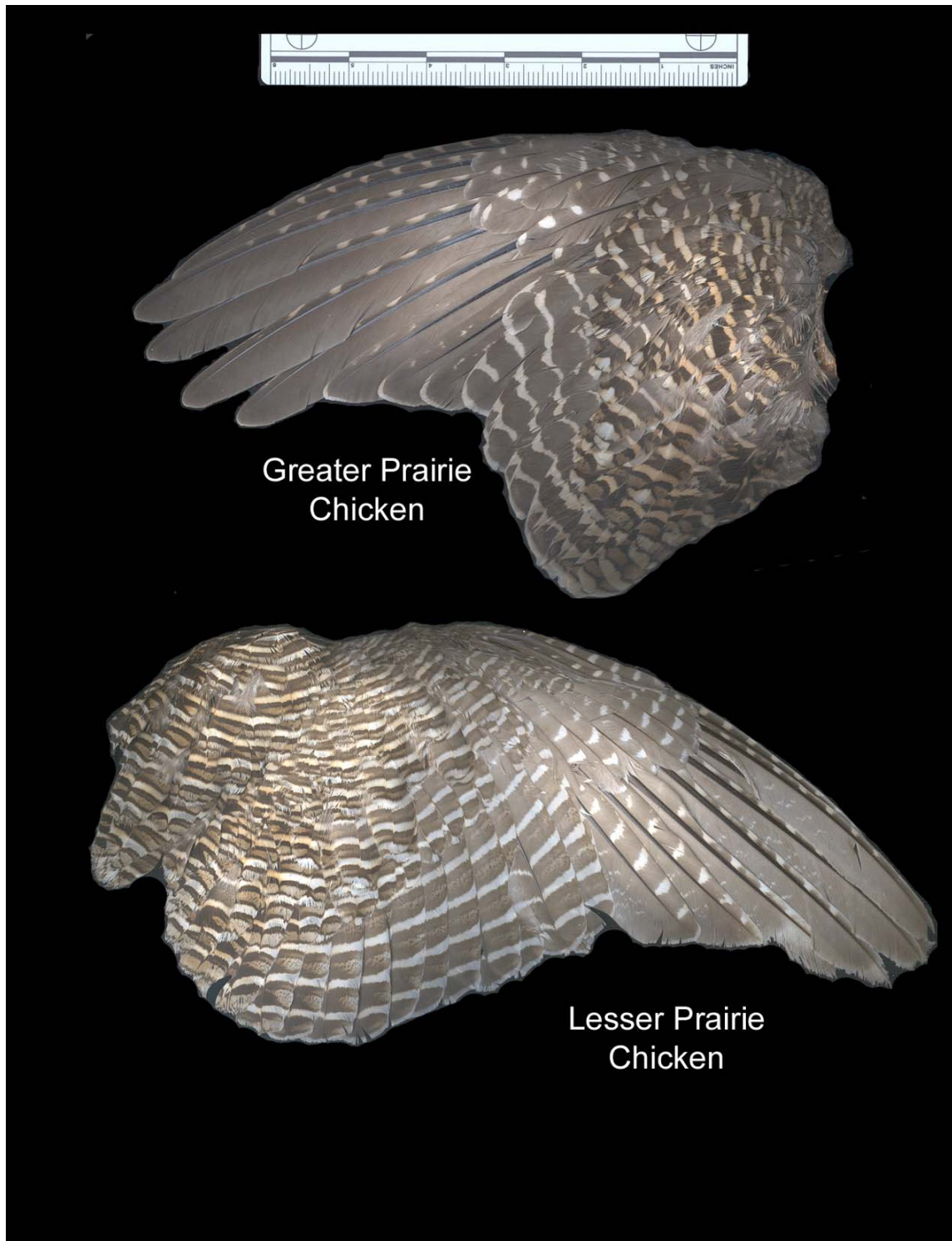
The wings of male **Ring-necked Pheasants** are unmistakable. They are large and exhibit strong barring through both anterior and posterior vanes of all flight feathers, strong barring and mottling of primary coverts, and striking, colorful patterning (rich reddish-brown and gray-green, among others) on secondary coverts. Female Ring-necked Pheasants also have strong barring throughout, as well as reddish-brown and black patterning on coverts.



The wings of male **Blue Grouse** are plain. There is no barring in the flight feathers. The upperwing coverts are gray to brown with a pattern of fine scribbles and, in many cases, a central white or buff streak along the shaft. Female Blue Grouse are more boldly patterned, somewhat similar to Ruffed Grouse. There may or may not be barring on the secondaries, but not on the primaries. The upperwing coverts are richly patterned with brown and black, sometimes with triangular white tips. The underwing coverts are gray with significant amounts of white.



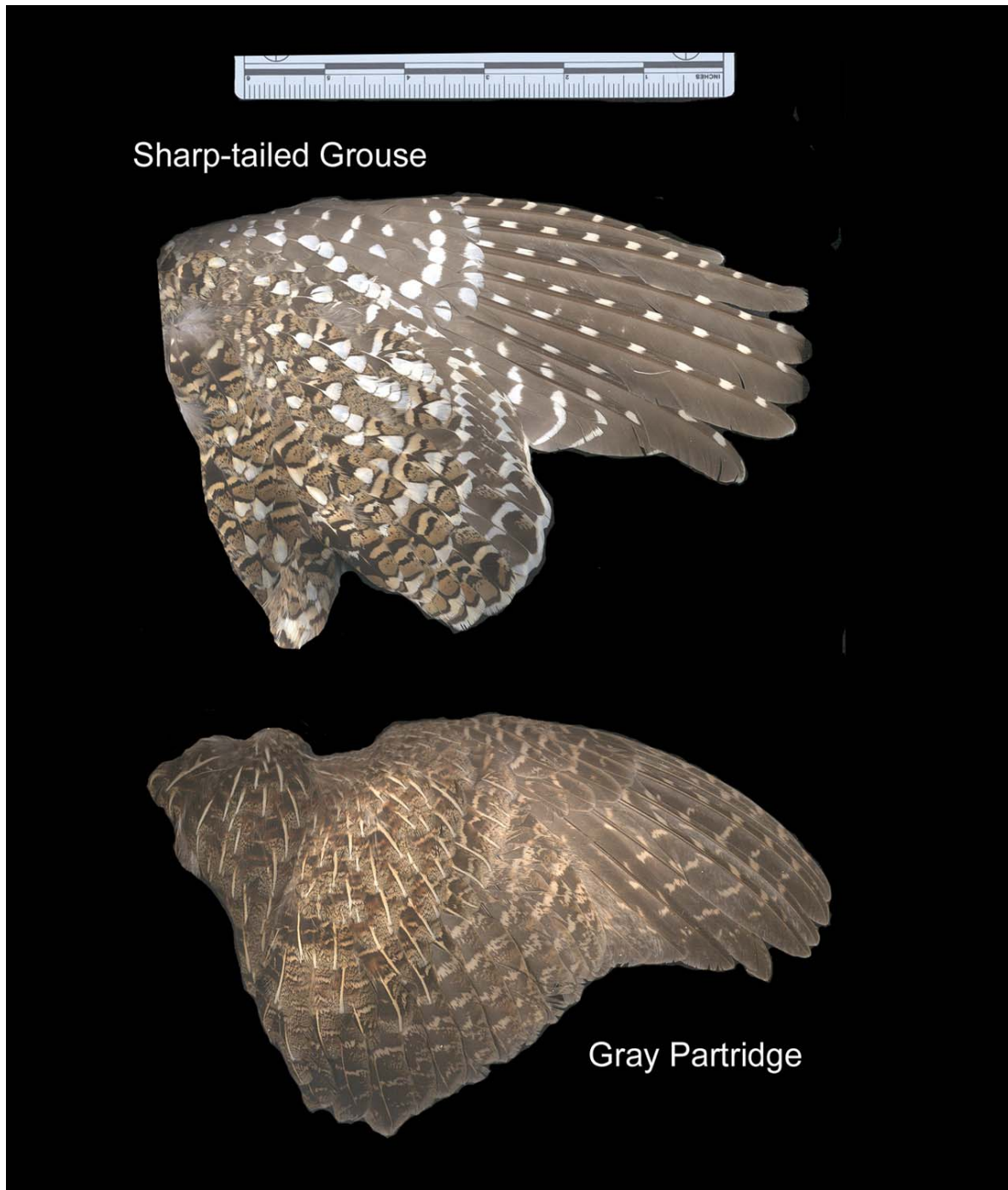
The wings of **Ruffed Grouse** are richly patterned with brown and black, providing “dead leaf” camouflage. There is no barring on the flight feathers, except for the narrow leading (anterior) vanes of the primaries. The wings of **Spruce Grouse** are similar, but much more gray, lacking the chestnut browns of Ruffed Grouse. The upperwing coverts of Spruce Grouse, unlike Ruffed Grouse, exhibit much fine black scribbling. Spruce Grouse wings resemble those of female Blue Grouse, but are smaller and plainer, with less patterning on the secondaries. Spruce Grouse underwing coverts, unlike those of Blue Grouse, are largely or completely gray, with little white.



Greater Prairie
Chicken

Lesser Prairie
Chicken

The wings of **Greater Prairie Chickens** have bold barring on the upperwing coverts, but little barring on the posterior vanes of either the primary or secondary flight feathers. **Lesser Prairie Chickens**, in contrast, have strong ladder-like barring across both vanes of the secondaries, as well as across all the upperwing coverts.



The wings of **Sharp-tailed Grouse** are distinctive, with white spots in the primary coverts and in the anterior vanes of the primaries. The secondaries have strong white bars, and the secondary coverts have white spots along with complex brown and black patterning. **Gray Partridge** wings are small, with narrow barring on the primaries (the only other species with barring on both vanes of the primaries is the much larger Ring-necked Pheasant). The secondaries have mottled barring. The upperwing coverts have distinctive pale streaks along the shafts; these are more prominent than in any other species.