### **Identifying the Sub-Adult Bald Eagle**

By Art Arenholtz

You could go to Alaska and learn how to identify all of the five ages of the Bald Eagle, but why spend all that travel time and money? During mid-winter, peaking in January, Bosque del Apache NWR is temporary home to dozens of Bald Eagles, including all five ages. Peak count for the winter of 2000-2001: 92 Bald Eagles

Let's start with the Bald Eagle that every birder in America can identify: the adult. This bird is described as "all field mark": large size; bright white head, neck and tail; dark brown body and wings; and bright yellow bill. It takes four, five or six years to reach this plumage, and almost nobody needs help naming this eagle.

But the Bald Eagle in each year's plumage prior to the adult plumage can be confusing. Sometimes, perhaps often, a juvenile (first year) Bald Eagle is mistakenly called a Golden Eagle by birders who don't see many eagles.

Lets' work backwards from the known: the adult. Let's assume that Bald Eagles take five years to reach adult plumage, and examine the 4th year bird and then each year down to the 1st year bird.

The 4th year bird has many of the characteristics of the adult, but certainly not all. The head is dingy white, sometimes with a dark eye-line, like an Osprey. The tail has much white, but it often has dark marks, especially a dark band near the tip of the tail. Often, there are scattered spots of white on the otherwise dark body and wings. The bill is mostly yellow, but with dusky gray smudges.

The 3rd and 2nd year birds look quite different from the 4th year bird. The abdomen shows white marks, which often are extensive. Also, dramatic white patches appear in the "wing-pits", i.e., where the wings join the body. The "wing-linings", i.e., the front half or so of the underwings, often show a considerable amount of white markings. A whitish triangle often

appears on the upper back of the bird, and the top of the head is often whitish. All of the above factors also apply to a 2nd year bird, but a key way to separate a 3rd year from a 2nd year bird involves the trailing edge of the wings. On the 3rd year bird, the trailing edge is "smooth", i.e., all (or all but 1) of the flight feathers are the same length, which gives the trailing edge a smooth or regular look. But on the 2nd year bird, about half of the flight feathers are longer than the others (they have not molted yet) and this causes the trailing edge to appear ragged or irregular. This feature is only seen in flight, but it can be apparent.

The 1st year bird is the most often confused with a Golden Eagle. The body of the 1st year bird is two shades of brown: darker on the breast and lighter brown on the lower body. There is no whitish triangle on the back, the crown is often buffy, the upper wings are twotoned brown, and the bill is dark. The head is dark and the tail is whitish with a dark band at the tip. Small wonder it is mistakenly called a Golden Eagle. But when the juvenile Bald Eagle lifts off or just lifts it's wings, you will see white in the wing-pits and the wing-linings, much like you would in the 2nd and 3rd year Bald Eagles. The Golden Eagle, though, would have dark wing-pits. The color of the wing-pits is a key difference between the Bald Eagle (white) and the Golden Eagle (dark).

#### Let's recap:

Adult: Bright white head, neck and tail.

Dark brown body and wings.

Bright yellow beak.

4th yr: Dingy white head, neck and tail.
Scattered white marks on body and wings.
Yellow bill with dark smudges.

3rd yr: White belly, white wing-pits, white wing-linings, white triangle on back.

Bill more gray than yellow. Smooth (regular) trailing edge of wings, except for perhaps one long secondary flight feather.

2nd yr.:Similar to third year, except the trailingthe edge of wings is ragged; about half of the flight feathers are shorter than the others.

Bill is medium gray.

1st yr.:Dark head, dark brown breast, lighter brown lower body, no white triangle on back.

White wing-pits and wing linings. Smooth trailing edge to the wings. Upper wings are two toned brown. Bill is dark gray.

#### Sub-adult Golden Eagle:

Dark head, dark body, dark wing-pits and usually dark wing linings.

White in the rear half of the underwings. This is often a well-defined area closer to the wing tip than to the body.

White tail, with a sharply defined dark band at the tip of the tail.

Table 1 summarizes these identification factors.

On the Refuge in winter, we see relatively few Golden Eagles. When you see an eagle in winter, ask yourself: "why is this bird NOT a Bald Eagle?" If it is a Bald Eagle, e.g., it has a white head or white wing-pits, ask yourself:" How old is it?" I think you will find that determining the eagle's age will increase your enjoyment, while you watch these magnificent winter visitors.

#### Acknowledgement:

I used information from two excellent sources for this article:

- "A Photographic Guide to North American Raptors" by Wheeler and Clarke, (which is sold at the Refuge Nature Shop in the Visitor center) and
- 2. A recent article in Birding Magazine, Feb. 2001, "Aging Bald Eagle", by William S. Clark.

Both sources have wonderful photos of adult and sub-adult Bald Eagles.

## Table 1

# Identifying the Bald Eagle

	1st Year Juvenile	2nd Year	3rd Year	4th Year	5th Year Adult	Adult Golden Eagle
Head Color	Dark	Buffy crown	Some white	Dingy white	Bright white	Dark
Bill Color	Dark Gray	Light gray	Gray with yellow	Yellow with some gray	Bright yellow	3 tone gray
Body Color	Dark brown above light brown	Dark brown above whitish	Dark brown above whitish	Dark brown, little white	Dark brown	Dark Brown
White in wingpits?	Yes	Yes	Yes	No	No	No
White in wing-linings?	Yes	Yes	Yes	No	No	No (Usually)
White triangle on back?	No	Yes	Yes	No	No	No
Trailing edge of wing	Smooth	Ragged	Smooth	Smooth	Smooth	Smooth
Tail Color	Dingy white with dark	Dingy white with dark	Dingy white with dark	Mostly white, little dark	Bright white	Dark