

## F O C U S



## Accipiters, the Forest Hawks

**Rich Stallcup**

*With fall hawk migration just around the corner, this Observer turns its "Focus" upon accipiters, updating a long-ago essay by our expert columnist Rich Stallcup. Further homage is now paid the forest hawks with gorgeous new drawings by Keith Hansen. — Editor*



This first-winter Sharp-shinned Hawk makes ready for another assault on Rich's junco flock.

**J**UST AS SMALLER AND WEAKER animals have evolved strategies for locating and ingesting their food, predators have evolved strategies, and anatomies, for locating and ingesting small weak animals.

In birds, most raptors can be grouped generically by their shapes, especially their wings and tail. Typical *buteos* are relatively wide-winged and have short, broad tails: they are made for soaring. *Kites* are airy and buoyant, as if to drift with dragonflies. Infamous for their flagrant ramblings, large *falcons* are built for speed and pluck their prey from the vines of space. Their wings are long and pointed; a long, flat tail stabilizes the body when at warp speed. Lanky *harriers* glide and teeter over short vegetation or open ground, ready to quarter and drop on anything that moves.

*Accipiters*, the forest hawks, have sturdy but short, wide wings and long

tails that serve as rudders during hot pursuit through branches in thickets.

There are three species of accipiters in North America north of Mexico. Sharp-shinned and Cooper's hawks are both fairly common in California during migration and in winter. Both are sparse breeders, as most of their populations nest in more boreal forests. The Northern Goshawk is a rare resident of the high Cascades and Sierra Nevada; it is of accidental occurrence in lowlands in winter. All three are voracious and fearless predators that specialize in passerine birds for food. Goshawks also devour tree squirrels, marmots, and hares.

#### Clues to Identification

**S**IZE: THERE IS NO OVERLAP in size between the species, but a big female Sharp-shinned would be close call with a small male Cooper's, and large female Cooper's is nearly as large as a small male Goshawk. In these kinds of birds, the females are larger than their males, but in the field any judgement of size must be made in a relative way. A pair of hawks seen together may be "gendered" by size difference, and the size of a single bird may be deduced relative to other birds nearby (or relative to telephone poles) or by the identity of a deceased critter in its grasp. Shape is a more useful character.

Shape of flying birds is by far the easiest and most useful I.D. character and does not change during molt or

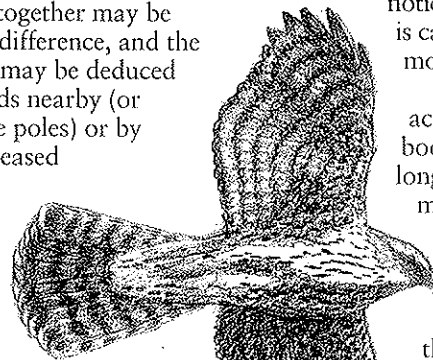
due to individual variation. Sharp-shinned are the most compact of these hawks, having relatively short, usually squared (when closed) tails, and small heads with no apparent neck. At a distance, one has to look hard even to see a head. The leading edge of the wing at the wrists is usually forward of the tip of the bill. The wings are short relative to those of Goshawks but are slightly longer relative to Cooper's'. When these birds are diving or gliding downwind, the wing tips appear more pointed than they do when the birds are soaring or flying at ease. Streak-breasted immatures may appear superficially like Merlins, but Merlins have larger heads, white eyebrows, brown eyes, and superior attitudes.

Cooper's are the longest-looking accipiters, usually having rounded tails that are relatively longer than those of Sharp-shinned. Their wings are proportionately a little shorter than Sharp-shinned's and obviously shorter than Goshawks', giving Cooper's an even longer appearance. The head of Cooper's is larger than that of

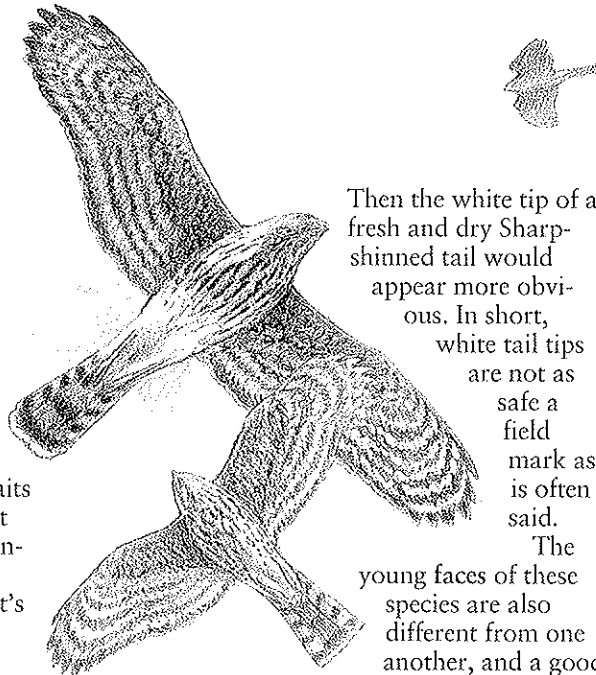
Sharp-shinned and is mounted on a noticeable neck. Most of the head is carried forward of the foremost bit of wing.

Goshawks are the widest accipiters, with the heaviest bodies and proportionately longer wings, which are also more pointed than those of the other two species. Their tails, in both relative length and terminal shape, are intermediate between those of their smaller cousins. Goshawks have large heads, thick necks, and heavy chests: they are easily mistaken for *buteos*.

Flight characteristics differ in more subtle ways than those of shape, but with much practice you can use them for specific identification, even at long range. Since flight is a matter of buoyancy and is much affected by air currents, it is diffi-



A young goshawk jolts through the forest in search of gray squirrels and Steller's Jays.



Young Sharp-shinned (bottom) and Cooper's hawks circle overhead, while a Sharp-shinned glides in the distance.

cult to describe in words. Sharp-shinneds' flight is the most tight and twinkly; Cooper's are more loose and floppy in flight; and Goshawks are the hunkiest — buteo-like — but they accelerate with deeper, more powerful strokes. One must look hard at known-species birds flying, until these traits become clear. Once they do, most individuals may be accurately identified as far away as they can be seen. That's all that can be said: it's a matter of practice.

The appearance of dark and light bands on the tail can usually be used to tell Goshawks from the smaller two accipiters. Because of the pattern on each web of each feather, and the way the feathers overlies one another, the Goshawk has wavy dark bands, while most Sharp-shinned and Cooper's have bands that are straight across. This mark is most useful on perched birds, where part of the tail is sometimes all that can be seen. It is most obvious on the light, ventral surface.

Distribution of color and pattern on the underparts of immatures is also consistently distinctive. Sharp-shinneds have white-based underparts overlain with blurred, brown, vertical streaks, causing a muddy pattern. Their leggings appear rusty brown due to dense barring. Cooper's usually have a tanner base color to their underparts, especially the breast, with discreet rows of teardrop-shaped marks that are sharper and blacker than the other species'. Cooper's' leggings and lower belly are whiter (more devoid of pattern) than Sharp-shinneds'. Immature Goshawks' underparts are like Sharp-shinneds' (blurrier than Cooper's'), but they have long, streaked undertail coverts. The undertail coverts of immature Sharp-shinned and especially Cooper's hawks are usually immaculate, with those of Cooper's often fluffing up around the sides of the rump. Again, this is all for *immature* birds; adult patterns are different. For adults, Goshawk is the one known for its big, puffy white crissum.

All of these species have white terminal tail bands, with that of Cooper's being wider and more flashy than that of the other two. If a Cooper's tail tip is worn or wet, however, that white band disappears.

Then the white tip of a fresh and dry Sharp-shinned tail would appear more obvious. In short,

white tail tips are not as safe a field mark as is often said.

The young faces of these species are also different from one another, and a good view will identify

most individuals. An immature Sharp-shinned's face is plain dull brown with little or no pale eyebrow. Cooper's' face is also brownish but with streaks of gold giving the head a warm aura, noticeable even in flight at close range. There is a narrow but definite tan supercilium. Goshawks' faces are light brown or gray — paler than the faces of the other two — and they have a bold tan or white eyebrow that flares behind the eye.

The crown of Sharp-shinned is rounder than that of Cooper's, which tends to be more squared, often with a slight crestiness towards the rear. The eye

of Sharp-shinned is located in the center of the face. That of Cooper's is more forward. The tarsii (the yellow unfeathered leg above the foot) of Sharp-shinned is really skinny, only about half the pencil-thick tarsus of Cooper's. Goshawk's legs are even thicker, and the long feathers from their tibula (drumsticks) cover the upper third. This all causes Goshawks to look shorter than the others when perched in equal positions.

Formerly, tail shape was emphasized as a (sometimes *the*) diagnostic feature, but there are too many variables affecting this trait for it to be reliable. Sharp-shinned tails appear quite rounded when spread, and Cooper's tails may be squared — or even notched when molting, as these feathers are dropped and regrown symmetrically, beginning with the innermost (longest) pair. Regardless of the shape of the whole tail tip, the individual feathers have different shapes — Sharp-shinned square and Cooper's more rounded. Whether spread or closed, Sharp-shinned tails show corners at the outer tips.

**A**CCIPITERS ARE RECKLESS, dashing, and valiant, but because they hunt in deep cover and blend with forest shadows, they don't have the glorious reputation of Peregrines, Prairies, or Gyrfalcons... and they just don't seem to care.

