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Dear Dick,  

This letter will portray the various birds trained in falconry and some of the men who train them. Much about falconry can be learned by merely describing the birds of prey which are trained for hunting—their good and bad points, abundance, and distribution. Insight into the sport comes also through sketching the lives of the men who go afield with hawk on fist. I will not be describing all the birds used in hunting, because some of these I have never seen. Some of the falconers mentioned here are my friends or acquaintances with whom I have trapped and trained falcons. Others I know through correspondence or by reputation. My attempt at presenting them in photographs did not succeed well. Some men I have written about are not pictured; photographs of most of the others are now dated, but a call for fresh pictures produced few results.

The Birds  

There are in the world about 290 species of hawk-like birds and 133 species of owls. Most birds of prey can be trained for hunting, but, in practice, relatively few types are used. Many birds potentially useful for falconry live in areas where falconry does not exist. Others are carrion-eaters, or live on bats, bees, frogs, or snakes, so that their interest for the falconer is minimal. Falconers have narrowed down their choice because of the raptor's abundance, flying and hunting skill, or type of prey usually taken. At least 32 diurnal birds of prey are trained for falconry. The owls form an unused group, but one with potential.

Falconers have traditionally broken into two groups the birds trained: the short-winged hawks and the long-winged falcons. This corresponds roughly with two zoological families (Accipitridae and Falconidae) under the large animal order of Falconiformes. The terms "hawk" and "falcon" are used interchangeably in these letters, but few falconers would use the word "hawk" in speaking of the gyrfalcon or peregrine falcon, for instance. In fact, however, the word "hawk" is a generic term including the falcons, so that all falcons are hawks but not the reverse. Most falconers consider a falcon to be the female of the species, more particularly the female peregrine. The male peregrine is called the tiercel, presumably because he is smaller than the falcon by one third.
Leaving such details aside, we are still left with the two main groups of short-wings and long-wings. This breakdown is more than fortuitous because birds within the two groups have characteristics in common which are quite marked. The short-wings have a broad, rounded wing when seen in silhouette; their eyes have an iris of yellow, orange, or red; they are highly-strung and nervous birds; a hood (leather cap) is not usually used in their training; they hunt close to the ground and prefer stealth and lightning dashes at their prey through woods or small fields and marshland; and they are flown directly from the fist of the falconer. The short-winged hawks usually dispatch their quarry by squeezing their iron-grip talons (accipio is the Latin for "to take to oneself").

The long-wings, by contrast, have a more narrow and pointed wing; dark eyes (a dark-brown iris); they are calmer in personality than the short-wings, usually hooded for training and in the field while not being flown; in the wild they hunt from great height and dive (stoop) on their prey; they are hunted by first being released and encouraged to attain some height above the ground (to "wait on", as falconers say). The falcons require more open hunting areas than the mixed woods and fields of the short-wing. Since they wander more than the short-wings (often also to great heights), the falcons are called back to a lure swung in the air instead of directly to the falconer's fist. Another distinguishing feature of the long-wings is a tooth-notch arrangement on their beak which enables them to grip and sever the neck of their prey. The long-winged falcons, however, normally kill in a dive or long tail chase—and usually kill by the blow of a partially-closed foot. Technically, men hunting with the long-wings are called falconers; those hunting with the short-wings are called hawkers, or astringers.

In general appearance the falcons look calm, noble, reserved; the hawks appear nervous, lethal, and vicious. Perhaps all this is because of the color of the eyes. Most men prefer the long-wings or falcons; the hawks take more time in training and, indeed, require more skill.

I wrote above that at least 32 birds of prey out of a much larger group are used in falconry. Trained for hunting in the family Accipitridae, only a part of which includes the short-wings of falconry, are seven eagles, five soaring hawks (Buteo) of the United States and eight of the short-wings: goshawk (many forms, most continents), shikra (Africa and Asia), Eurasian sparrow hawk, three other sparrow hawks: Besra, African, and Levant (Africa and Asia), Cooper's hawk (North Amer.), and sharp-shinned hawk (North Amer.).

Twelve falcons or long-wings (part of the family Falconidae) are used in falconry: gyrfalcon (circumpolar), peregrine (universal), hobby (Eurasia), merlin, kestrel, saker (Eurasia), prairie falcon (W. North Amer.), lugger or jugger (Asia), lanner (SE Europe, Africa), and three close relatives of the peregrine: Barbary falcon (N. Africa), black shahin (Asia), and red-naped shahin (Asia). Both the merlin and kestrel are found in several forms on most continents.
Claus Fenzlof of W. Germany with a golden eagle (steinadler) at the German Falconers' Club meet, Burgsteinfurt, W. Germany, 1966.

Of the birds listed above I shall describe briefly a few with which I have experience or which are of outstanding importance in falconry. As with the falconers, I do not have portraits of all these birds.

Eagles and Hawk Eagles: These are the largest birds of prey used for hunting. The golden eagle (Aquila chrysaetos), or kongeørn in Danish, is the best known of the group, but is trained by few falconers in North America, Europe, and Asia. The Siberian golden eagle, or berkute, is trained to hunt wolf, fox, and antelope, but most eagles are flown at hare and rabbit. The golden eagle is a heavy bird (11 to 14 pounds) so that falconers training it must be strong just to be able to carry it about all day. Eagles, with their large wingspread (up to 7 feet), pose a threat to the falconer with their wing primaries alone, to say nothing about the risk of small children and pets being hurt by this rather dangerous bird. One English falconer used a fencing mask to protect his eyes against the eagle's wing feathers. As with other birds of prey, the eagle's beak is not dangerous to man; the bird's feet, however, can be dangerous.
In summary, the eagles are more novelties than anything. They have also become rather scarce recently. In the western part of the United States and Canada, the golden eagle has been persecuted relentlessly by sheep farmers. Many eagles are gunned down for sport from small aircraft; even more are killed by eating poisoned sheep carcasses on the ground. Some protective measures have been introduced recently, but as usual a bit too little, too late.
The bald eagle, our national emblem, has declined catastrophically in many areas of North America. No one that I know trains these white-headed eagles, although nature writer Daniel Mannix has a bald eagle 30 years old. This eagle was once trained by Mannix to hunt iguana lizards in Mexico.

With the eagles should be mentioned the several species of hawk-eagles which are used throughout the world for hunting. These birds are smaller editions of the true eagles, and are used by several falconers in Europe and even more extensively in the East. I have no experience with hawk-eagles.

The Short-wings: The Cooper's hawk (Accipiter cooperii) is a fierce little North American hawk (the "Waskite of Virginia" referred to by Izaak Walton) which is fairly abundant in North America. The photograph below is of a Cooper's hawk in adult plumage. It is a bird of the fields and woodlands and is a large edition of another North American short-wing, the sharp-shinned hawk (Accipiter striatus). Both the Cooper's and the Sharpys have been trained for falconry. In Europe a similar Accipiter, the sparrow hawk (Accipiter nisus), is widely used as are near-relatives in the East. Usage of bird names varies throughout the world; the European and Asiatic sparrow hawks should not be confused with a falcon we call the sparrow hawk in North America. The latter falcon should be called kestrel, as it is in the rest of the world.

The Cooper's, sharp-shinned, and sparrow hawks take second place to the goshawk (Accipiter gentilis) in falconry, mainly because of their smaller size. The goshawk is probably the most widely used of all hawks in falconry. It occurs in 13 subspecies in the

An intermewed eyass Cooper's hawk (female)
Northern Hemisphere and in areas where falconry is, or has been, practised. Its abundance, hardiness, and size, together with a keen hunting personality, put it in the top rank of birds used by falconers. The goshawk, in various forms, is found throughout the world. It is a shy and wary bird in nature. Because of its wildness, the gos is a bit taxing to train, but it offers good sport and exercise for those falconers with persistence and patience. The goshawk is, at times, unpredictable. Most falconers will not leave it in a hawkhouse if other birds are present; the goshawk has been known to kill every other bird in turn if it gets loose in the mews.

One leading expert on goshawks is my friend Mr. J. H. M. Pieters of Enschede, Holland. Pieters sent us the bird pictured below. He is also shown on page 7 with his old goshawk (15 years), a bird he was pleased to loan out to other falconers if they wanted some good sport as a change from hunting with falcons.

The introduction, in the early 1950's, into Europe of myxomatosis by a French doctor who wanted to rid his garden of rabbits, caused a decline of the rabbit population over wide areas of Europe and Britain. This decline caused a similar fall in goshawks and other rabbit-eating hawks. The goshawk is only now beginning to win the protection it lacked for so long. It has always been considered an enemy of shooters and gamekeepers because of its dietary habits. But I think we are now beginning to realize, finally, that such predators are necessary to maintain a healthy, vigorous stock of game.

The Long-wings: The gyrfalcon (Falco rusticolus) is the largest of the falcons. The Danish for gyrfalcon is jagtfalk (hunting falcon), which is a suitable name for the bird which was widely
The gyrfalcon is a northern bird of circumpolar distribution with widely varying coloration. The discussion about the different possible subspecies and varieties of gyrfalcons has been endless. A vast literature exists dealing with this difficult taxonomic question, but I prefer a simple designation of Falco rusticolus without different species and subspecies, on the assumption that the gyrfalcon is a polymorphic form with varying color plumage ranging from the darkest birds (Labrador) to almost pure white (Northern Greenland and Canada). Between these two extremes are gyrfalcon populations in Iceland, Scandinavia, western Siberia, and eastern Siberia-Alaska. Another region supports the geographically-isolated Altai gyrfalcon of southern Russia. I am not convinced that the last named is even a gyrfalcon.

The gyrfalcon, or simply gyr as falconers know this bird, may not be the best bird for falconry, but it is surely the most sought after. Perhaps this is because it is the largest falcon (weighing up to four pounds), but most probably because it lives in remote areas, and is not easily obtained. Also the Greenland gyr, the classic "white falcon" or king's ransom, is perhaps the most beautiful bird of prey in the world.

The name gyrfalcon looks somewhat strange; many people have had a guess at the word's origin, with little common agreement. The Old Norse
Haggard gyrfalcon in Greenland

Geiralkī (spear falcon) was applied to this bird. One writer claims the word gyr means grey or bellicose. Another, old stupor mundi Frederick II, wrote: "they are called Girofalco from iero, the Greek for "sacred" or from gyri meaning Lord; hence, "lord or chief of falcons". One writer says the name derives from the bird's superior gyrating or circling qualities. Another expert (Professor Tillander) claims the word comes from the German Geier (vulture), which also leads to Gierige in Danish—eager or greedy, hence the vulture falcon or greedy falcon. I go along with Frederick the Second.

Because of its relative inaccessibility, the gyrfalcon is one of the least known of our raptors. The biology, breeding, and migratory habits of these birds need further study. The gyr is really a desert
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falcon, for its arctic home is a physiological desert. The gyr is believed to possess an unusual physiological set-up with an oxygen reversal system (similar to the arctic wolf) enabling it to burn up oxygen at an excessive rate while hunting. The gyr is also thought to have a very large heart in relation to body size. These facts, if indeed they are facts, demand investigation.

One thing is clear about the gyrfalcon: it is prone to disease and sickness when brought out of its natural environment (as are Eskimos to colds and measles) and is rather difficult to keep in flying shape. Most people who have had casual contact with the gyrfalcons claim that they are slow flyers without spirit. The latter may be true, but I have seen gyrfalcons in serious pursuit and I am convinced that they are the fastest bird in the air. In matter of spirit, they must bow to the smaller but mightier peregrine falcon, which has no peer in falconry.

For its dashing spirit and noble character, the peregrine is the most esteemed bird in falconry. It is the most spirited, courageous, and skillful of hunters (I have seen peregrines chasing gyrfalcons in Greenland). The peregrine is about one half the size of the gyr; its weight varies from about 18 to 28 ounces in males to 26 to 40 ounces in females. The variation is with geographical distribution; there are about 15 subspecies of this falcon. It is found universally, but is nowhere a common species. The North American form is known as the duck hawk and indeed its scientific name of Falco peregrinus anatum means literally "wandering sickle of the ducks". Most of my falconry experience has been with peregrines. The finest bird I ever flew was a peregrine (photo opposite).

Passage peregrine falcon, weathering
In recent years the peregrine has disappeared from eastern North America, at least up to Nova Scotia. Chemical pesticides are indicated as the cause of this rapid decline. I will write more about this sad subject in another letter. Peregrines still migrate in autumn from northern Canada and Greenland past the shores of eastern United States. These northern peregrines are doubtless also being poisoned gradually, but our knowledge of their biology and abundance is about the same as our knowledge of the gyrfalcon. Our native duck hawks (rather a misnomer) are almost universally protected—but there are only a few to protect. Falconers are still able to trap and train the northern peregrine and it is even hoped that the breeding of captive peregrines can some day provide birds to re-stock areas where this noble bird is now extinct. These projects are only now beginning, but we believe that the breeding and raising of peregrines in captivity is just around the corner.

I hope that our river cliffs and stream gorges will once again be used by peregrines for nesting. I would like my sons to experience what I consider one of nature's greatest thrills—seeing wild falcons hurtling through the air near their nesting ledges.

Halfway between the peregrine and the gyr in size is the saker falcon (*Falco cherrug*). This is the falcon used for hunting in the Middle East. The saker is a good hunter, large in size (averaging 40 ounces), but not as beautiful as the gyr or peregrine. I have no experience with the saker. I have seen only one trained saker in my life, although Joan and I saw hundreds during an overland jaunt through the Middle East to India ten years ago. The saker is a desert falcon; some few find their way to falconers in Europe and North America.

Another desert falcon is the peregrine-sized prairie falcon (*Falco mexicanus*) of North America. The prairie falcon is perhaps one of the most promising birds for falconry; it has not been reduced in number quite so much as the peregrine. It is a hardy bird and, in the drier areas, endures great extremes of temperature. Unlike most falcons, it does not live on feathered prey, but mostly on ground mammals—prairie dogs and ground squirrels. The prairie tiercel I flew last year (photo p. 11) is now in Holland doing well. My many travels since last June prevented me from keeping him, so he now belongs to J. H. M. Pieters. I saw the little tiercel last November, after his first moult, with new feathers of a dusty bluish-tan. The prairie falcon has some traits in common with the saker and the gyr. All three of these birds hunt from a low level and, like the goshawk, use surprise as a hunting tactic.

Going down the ladder in size we come to the merlin (*Falco columbarius*). This dainty falcon has the unfortunate and erroneous name of pigeon hawk in North America. The merlin (*dværgfalk* in Danish) is mainly a bird of the northern coniferous forests. It is found throughout parts of Alaska, northern Canada and Labrador, Iceland, and northern Europe. Other merlins are found elsewhere in the world, although not trained in falconry. Our merlin, in fact, is not widely trained. It is
Eyass tiercel prairie falcon on a screen perch

rather easily tamed, but its small size makes it a difficult bird to keep in cold weather. When trained during the winter, it is usually fed twice a day. The merlin was the traditional lady's hawk; the most famous flights were at larks.

The birds most commonly used for falconry, at least in Europe and North America, are the goshawk and the peregrine falcon. In summary, five main groups of birds are used in falconry, not all of which were mentioned above:

1. The genus *Accipiter* — gos, Cooper's, sparrow, and sharp-shinned hawks.

2. five genera of hawk eagles

3. genus *Aquila* — golden, imperial, tawny, and bald eagles

4. genus *Falco* — gyr, peregrine (with Barbary and shahins), prairie falcons; also the saker, merlin, kestrel, lanner, and hobby.

5. miscellaneous *Buteo* — red-tailed hawk, Harris' hawk, etc., in North America.
All the birds of prey are in some way carnivorous. They are shy and wild creatures. They nest in tall trees in secluded woods, or on inaccessible cliffs. But, by constant persecution throughout history, they are becoming steadily more uncommon. Shooters, egg collectors, and, yes, falconers have taken their toll of these natural hunters. Clearing woodland for housing, highway construction, ski and mountain vacation resorts—all have ruined the hawk's natural habitat. And now modern agriculture with its array of poisons threatens to finish the job.

Falconry lingo: The terminology used by falconers is a strange, archaic one as will become obvious in future letters. Some people consider this use of language as snobbery in the extreme. But some of the old terms have had to cling on because this language is handy, saves time in communication, and is really irreplaceable. I will be devoting some space in the future to the specialized language of falconry (as well as to everyday words and phrases which have come from falconry); but I will list here a few of the terms used in the picture captions.

- **Passage hawk or falcon** — first-year bird trapped while on autumn migration (or passage). Also called a "red" bird.

- **Baggard** — a hawk or falcon trapped as an adult.

- **Eyass** — a hawk or falcon taken as a nestling and trained for hunting after it is fully feathered.

- **Intermewed** — eyass or passage bird in its adult plumage after one or more molts in captivity. The word intermewed indicates the bird has been "through the moulting house", or mews, as the hawk house is called.

- **Weather** — to place a hawk outdoors on a perch to rest, take the sun, and bathe.

- **Block** — a perch, usually of wood or stone, on which a falcon is placed outdoors to "weather".

- **Screen perch** (or rack) — indoor roost on which hawks sit at night.

The Men

What kind of men become interested in falconry? The eminent British naturalist James Fisher wrote recently:

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* Fisher, James and Roger Tory Peterson. 1964. *The World of Birds*  
New York: Doubleday.  p. 248
"falconry still inspires fighting men and challenge men—soldiers, airmen, climbers, explorers. The training, for killing, of killer birds fascinates certain gentlemen of power who dream of yesterday, and love the drama of the aerial chase."

Fisher, in this book, takes a typical, albeit moderate, ornithologist's viewpoint about falconers. I do not know about fighting men and challenge men or even about "certain gentlemen of power" (whoever they may be), but I do know, from my associations with other falconers, that falconry is for men who love the outdoors and see a fascination in being at close range to falcons and hawks. Although there will always be exceptions, I believe that most falconers are not engaged in the sport because it is spectacular or unusual or because they want to attract attention. Most are not interested primarily in taking game, but rather in getting to know better the birds of prey which are the very embodiment of many qualities we admire most: physical perfection, courage, grace, and, to some, speed. Perhaps more men would become falconers if they had the time. Few people realize what demands the sport makes on its followers. It is definitely a 365-days-a-year proposition.

It is difficult to be objective about a subject one is close to, and I am writing this as a "talker" of the talker-hawker set I wrote about in WGM-15 for I have no birds at present. But one trait which all falconers seem to have in common is that they are willing to take risks. From the start, when birds are either trapped or taken as young from tall trees and steep cliffs, falconry involves risks. Every time a trained falcon is flown, there is a certain chance that it will not return or that it will be shot. Weeks of training can thus evaporate in a second.

If taking a chance is characteristic of most falconers, the one man I know who epitomizes this quality is C. F. McFadden of Philadelphia. McFadden is the "great, hulking character" of WGM-15 who taught me falconry 20 years ago. Corny McFadden trains both falcons and hawks. He once ventured to Greenland to trap white falcons; his drive carried the expedition to success. If his nerve offended some, it was merely the

C. F. McFadden lecturing on falconry. McFadden, like many falconers, often talks to conservation groups, scouts, and hunting and fishing clubs.
C. F. McFadden and W. F. Turner in Greenland, 1951

Artist Bob Widmeier with a freshly-caught haggard peregrine. Haggards are not kept for training, but are banded and released.
outward manifestation of a man willing to take risks. He could be rather impatient with people who got in his way, but also he could be charming and completely entertaining with his self-admitted "gift of gab".

McFadden's co-leader on that Greenland trip was Bill Turner of Washington, D. C. Turner, like many others who have been active in falconry, no longer flys hawks. His skill at falcon-trapping is legend, but he has apparently sought out newer challenges. Both Turner and McFadden are businessmen. McFadden is not an 8 to 5 commuter, but runs his advertising sales business in such a way that he can fly hawks almost daily.

Other falconer-businessmen in the Philadelphia area are Jim Rice (and son), Bob Berry, and Lou Woyce. They are all fine falconers, operating solely with long-wings. Around Turner near Washington live Alva Nye, Brian McDonald, Jim Fox, Dick McCown (and son), and Steve Gatti. McCown married my second cousin, but we have never hunted together with hawks.

One rarely loses interest in falconry, but many men become inactive because they do not have the time which falconry requires. These are
Major R. A. Graham, USAF, in Greenland, 1967

Morlan Nelson, 1962
usually businessmen or those men with jobs which occupy them during daylight hours. Some falconers, who have no time for the sport during the week, fly their birds only on weekends. But many falconers have jobs with flexible schedules or that provide a lengthy summer holiday: doctors, artists, veterinarians, high school and college teachers, and writers. Erich Awender of Freeport, Illinois, is a surgeon; Professors Meng, Jamieson, Enderson, and Stabler are university zoologists; Bob Widmeier, Canada's Frank Beebe, and Germany's Renz Waller are wildlife painters. Widmeier, one of our best trappers, once had a flourishing commercial art studio in Minneapolis. He is now a justice of the peace near Duluth and still paints—and hawks.

The airmen of James Fisher's description of falconers are well represented: Gene Spuhler is a TWA pilot, Dick Graham flys jet fighters and will soon be off to Viet Nam. Vern Seifert is a bush pilot in Alaska. The late Col. Luff Meredith of the US Air Force was called by some the dean of American falconers.

Writers have been represented in American falconry by Ed Reid, editor of the Las Vegas Sun. Reid was a Pulitzer Prize winner as the journalist who exposed the Mafia. Nature writers Dan Mannix (Last Eagle
and The Fox and the Hound) and Robert Murphy (The Pond; Varda: The Flight of a Falcon; and The Golden Eagle) have both been eager falconers. Their books are classics of nature writing. Wildlife researchers Dick Fyfe and Ernie Kuyt (two Canadians), and the Craighead brothers Frank and John are all falconers. The Craigheads' exploits, written up in the National Geographic Magazine, are well known. Their interest nowadays is more towards trapping and studying grizzly bears, but their sons and nephews carry on the cliff climbing and falcon studies.

Another cliff climber, skier, and member of the 10th Mountain troops during World War II, is Horlan Nelson of Boise, Idaho. Morley is an eagle and gyrfalcon expert and, as a movie-maker, runs Tundra Films—alongside his regular job as a Soil Conservation Service hydrologist and snow avalanche expert.

Another gyrfalcon man, now president of the North American Falconers' Association (current approximate membership 230), is Hal Webster of Denver, Colorado. Webster works with Bell Telephone.

These men represent a cross-section of North American falconry; none are outstandingly wealthy, all are outdoorsmen (some more than others, for the term "fair weather falconer" is heard now and then), and all are what might be called rugged and, yes, Mr. Fisher, I suppose also challenge men.

European falconers follow this pattern almost to a man, although one sees a few independently wealthy falconers, who are absent from the American scene. There are veterinarians, zoologists, writers, photographers, factory owners and managers, and even professional falconers. Falconry interests were also represented in the air forces: Hermann Göring in Germany and Lord Portal in England.

The common denominator of these men seems to be time (either available or sacrificed) and an outdoor interest focusing on birds of prey. Few, aside from the professional writers, have produced books on falconry. Little time is left over after the hawks have been flown and fed.

Sincerely,

Bill Mattox

W. G. Mattox

Received in New York March 4, 1968.