5 Training

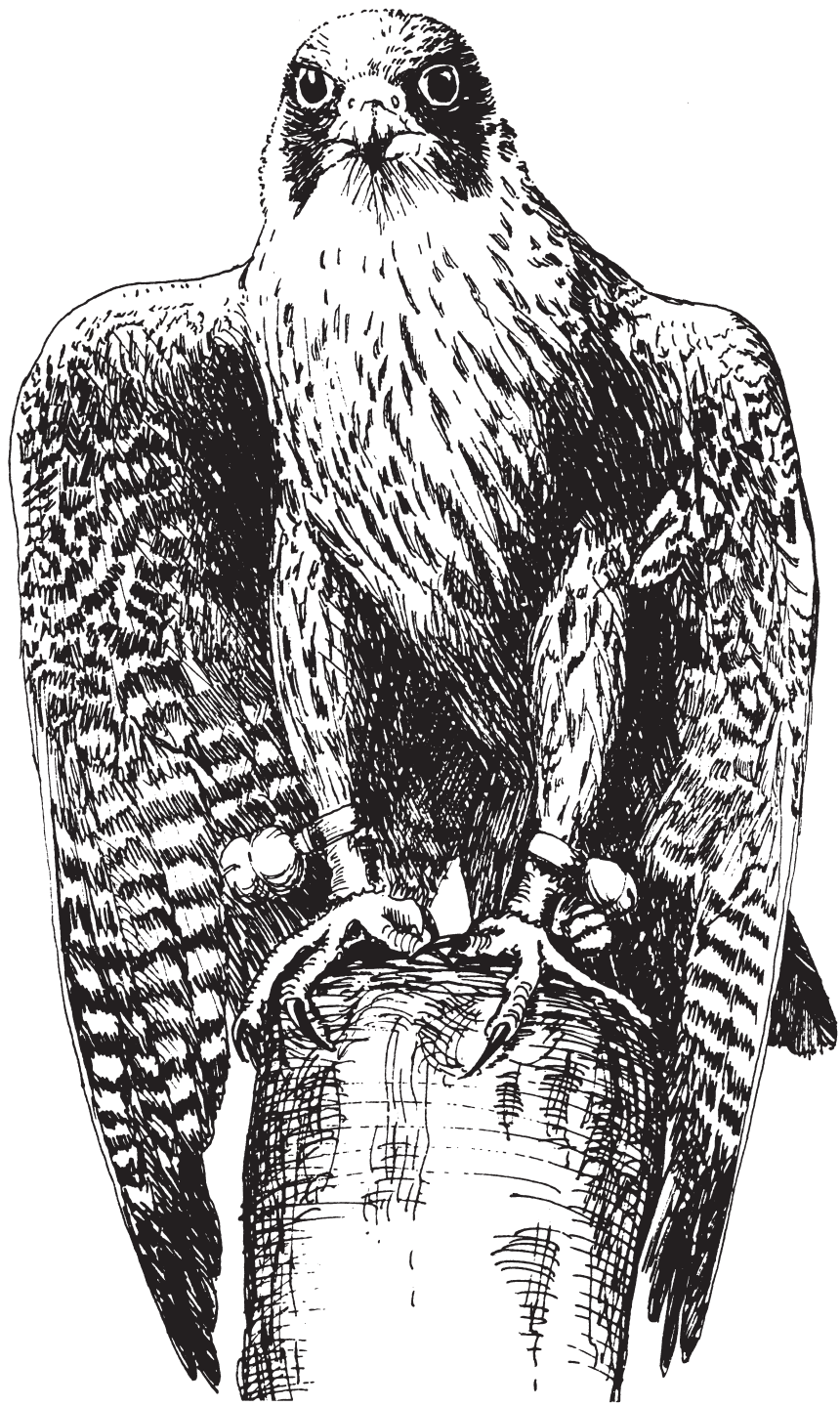


Figure 5.13.1 This fit, young, male peregrine looks bright, alert, and eager to fly.

and Conditioning

5.1 The training program

The training program has to consider two aspects side by side. First is the actual mental training using the systems already discussed. Second is the physical management of the bird, making sure that it has a good appetite to be responsive to your training efforts and developing the physical condition of the bird so that it is fit and strong.

The training of a wild-caught accipiter differs in some ways from that of a young domestic falcon and therefore it would be pointless to give a potted recipe for training. Different birds must be brought on at different rates according to their responses. The skilled falconer will bring on a bird in such a way that he doesn't make it stale with needless repetition and yet doesn't venture out onto the thin ice of risk. The fastest bird I ever trained was a hacked New Zealand falcon called Sally. From feeding her on the fist for the first time to stooping loose to the lure took twenty minutes. Marvelous. On the other hand, I had a haggard hawk-eagle called Gorgon who never flew loose, despite all my efforts. He was a very, very slow, deeply suspicious bird. He seldom bated, he just looked at me with an unchanging, impenetrable trancelike stare.

Although there are these differences, the falconer should have a fairly shrewd idea of his own schedule. If his hawking is planned to start on a certain date, he should work forward from that date and plan out his program with certain targets to aim for along the way. Part of my job is to train 20–25 crow falcons each season. Each bird goes through a preplanned program of training and, allowing for bad weather and individual differences, is ready by a set date. I tend to be very jealous of the bird's intellectual virginity. It is a lot easier to take a young bird and train it right first time, straight through. Its training goes bang, bang, bang,—finished. On the other hand, if someone has messed it up in some way, made it hoodshy perhaps, then everything is on stop while this is sorted out and it might take more time and effort to rectify than the rest of the entire training.

For the crow falcons, my program goes like this:

Day 1–5—hatched in incubator and hand reared.
Day 5–10—reared by imprint falcon until ring stays on.
Day 10–40—reared in big pen by a natural pair of falcons.
Day 40–45—in the hack box.
Day 45–60—flying at hack.
Day 60–80—loose in a large free-flight pen with other hacked falcons.
Day 80—measured, fitted with anklets, jesses, and tailmount, taken up hooded.
Day 81–85—hooded, or secluded weathering while weight is slowly reduced.
Day 85–99—taken in hand, trained to fist and lure, jumped to fist for exercise and flown loose.
Day 99–105—stooped to lure and jumped to fist for exercise.
Day 105–110—long-lured over 500 meters and introduced to dragged dead crow.
Day 110—entered at a crow and kept to one kill a day until at least ten kills. Not flown at quarry the day after a strenuous flight.
Day 120—ready for ringers!

Some readers would see this and think that my training schedule starts when the falcon is 85 days old. This is not so. The training program starts on the day the egg hatches and the falcon goes through a very careful process of imprinting, learning, developing physical skills and mentally maturing. The daily food association with man is only introduced at day 85; by this time the falcon has already graduated through several major stages in its training.

It is important that the falconer works out a simple program for his individual bird and takes the training through in a positive, progressive manner. Young hawks are tremendously receptive and to dither with a half-trained bird is to invite problems. There is a whole myriad of problems waiting to beset birds which are not taken through training at their natural rate: screaming, aggression, carrying, "moodiness," difficulties in entering at

quarry. The experienced falconer must learn to anticipate and side-step all of these.

As a breeder, I send out many young hawks each year to their new owners, and inevitably, every year some of them don't turn out well. This is almost always due to the falconer who does not have the ability to do the bird justice and who is not prepared to take responsibility for it. Instead, he blames it on the bird. On the other hand, all the birds which stay behind with us turn out well, because we put extra attention and work into any developing problems, in order to overcome them.

Therefore, assuming you are soon to take delivery of a new bird, work out two schedules for yourself: the first schedule is your calendar, showing target dates through to catching quarry regularly. Your second is a list of attributes you wish your hawk to have. At present you are at point A: early summer with an untrained, unfit, hawk. You have to get to point B: early autumn with a trained, fit bird. Maybe you are getting a Harris hawk, then here are some possible targets:

- The hawk should be in top class health and feather condition.
- She should hood well, and have a well-fitting hood.
- She should be good mannered on the fist and never try to foot you.
- She should come immediately 200 meters to the fist without reward.
- She should be fit and capable of 150 high jumps in one session.
- She should be experienced in wind and hilly terrain and should wait on in suitable areas.
- She should work well with your dog and the dog with her.
- She should work well from the lofting pole.
- She should follow you well and choose suitable high perches for overlooking the terrain.
- She should take rabbits well and also have experience with feathered quarries.
- She should not scream.
- She should work with other Harris hawks to which she has been properly introduced.
- She should be pleasant to handle on the kill and throughout the day.

During the course of this section I will be looking at some of the aspects you will need to cover when going with your hawk from point A to point B.

5.2 The wild hack

Much has been written about how to hack birds of prey, systems of hack management and their pros and cons. Stevens (1955) and Sherrod (1981) cover the main points quite adequately. My own experiences have been limited to buzzards, kestrels, merlins, sakers, peregrines, gyrs, various hybrids, and New Zealand falcons. I have hacked the latter extensively both as juveniles and as adults and have even had them nesting at hack. Each year we wild hack 20–30 big saker/gyr/peregrine type falcons in Wales and in Northumberland.

A hard-penned youngster is not safe to put out at hack immediately because it can already fly and might become lost. Also, if hacked from its original home it may well interfere with other breeding pairs on the premises or on the weathering lawn. Hacking out high-spirited falcons intended for serious falconry is a different matter again from having a few cuddly kestrels or buzzards lurking around the yard. Big falcons can potentially cover considerable distances, paying particular attention to such magnets as pigeon lofts. In most of Britain they are thus exposed to unacceptable danger. Apart from human persecution and shooting, the falcons have to run the gauntlet of busy traffic and a landscape festooned with wires. The hack site must be chosen so that there are none of these hazards, no gamekeepers, no rivers, lakes, or water-troughs in which the hawk might drown and the minimum of barbed wire fences. Standing crops are taboo because if a young hawk lands in one it can't relaunch itself, the same can apply to dense forestry plantations. Inquisitive, stampeding cattle are to be avoided. In short, you need to be able to control the landuse over the immediate 100 hectares (200 acres) or so around the hack box. Some stock and foxes can be excluded temporarily with electric sheep netting.

To get them to fly well, the box should be on a slope with plenty of hill-lift in all the main wind directions. This will draw them like a magnet and will encourage them to get into the air. It is hours in the air in strong wind which really does the good.

There can be no doubt that, if the falcon survives, it is improved physically by hacking. Its wind and muscles are better, it foots better and, most of all, it flies better. It begins to resemble the passage falcons, now no longer available to most falconers. But what does it do to the falcon mentally?

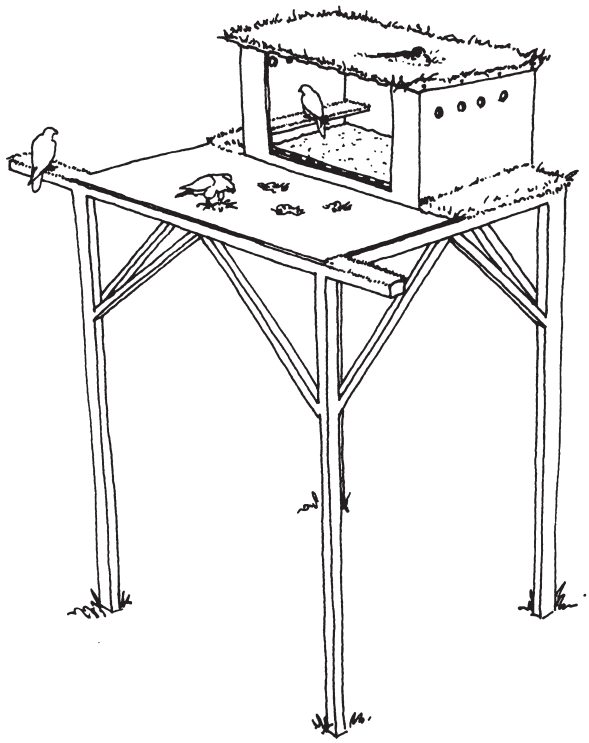


Figure 5.2.1 Tower hack box for young falcons.

A naturally imprinted falcon, even though captive bred, has a fear response of man and does not regard the falconer as a parent figure. Flying wild at hack (in contrast to tame hack) does not encourage a bond between falconer and bird and so this has to be forged later. The hack falcon may learn to wander and selfhunt, both attributes which we avoid by not extending the hack too long. When it comes to tackling quarry the young bird is constantly disappointed and without the falconer's assistance may give up on some species such as rooks and crows and be difficult to enter to them again. While in theory hack is supposed to teach the falcon that it cannot catch pigeons, in my experience it is more likely to teach them they can catch pigeons, especially if they tear around the countryside and develop the right tactics. None of these selfhunting problems arise in the first two weeks of hack.

Falcons which are intended for game hawking with waiting-on flights, are required to centralize over the falconer in expectation of invisible game being flushed out. Wandering off, chasing non-game species, landing on the ground or undertaking attack styles other than the stoop, are considered faults. Therefore on balance the potential game hawk may learn more bad habits during hack than it gains in terms of physical fitness, flying skills and footing ability. Such skills are probably best learned by an initial intensive training to a swung lure, followed by training in waiting on (see section 5.18) and then by consistently being served with real game to induce an almost mechanical routine of going up, waiting on and stooping. A strong bond of faith in the falconer serving game is the essential key to all this.

Falcons intended for flights out of the hood at rooks, crows, seagulls, houbara, stone curlews, magpies, larks, and so on are required to undertake a much wider variety of techniques ranging from direct flying attacks to ringing flights, shepherding, stooping, and tail-chasing. Their footing too has to be considerably better than the average game falcon's. The falcon needs a knowledge of quarry, of the elements and of tactics which can be learned only through experience of real situations. There is no short cut to producing such maturity. A period at hack benefits such a falcon, especially if it is a slow-maturing clumsy bird such as young sakers and gyrs. We have occasionally had to train some unhacked ones due to having too many birds for the hack site capacity. The difference in their pursuit flights are immediately noticeable.

The first two or three months of a falcon's life are critical. If the bird is not entered and thoroughly wedded to its intended quarry it may orientate itself more toward the falconer as a parent figure, become lure bound, start to scream and in some cases (particularly malimprints) start to attack him.

Most of the above is fairly standard teaching and, as far as it goes, is perfectly true. However, since we have been hacking large falcons on a regular basis we have been able to experiment with the finer points of the procedure. This is what we've evolved: first of all one must breed sufficient birds to make up same-age cohorts, this means 2–6 falcons all hatched within about five days of each other. These are placed in the hack box overlooking a broad landscape. The hack box is well ventilated with a food hatch at the back and an open vertically barred door at the front, facing north or east. Branches or perches around the hack box enable the youngsters to clamber out and to return easily. The fledglings are placed in the box one week before they are capable of upward flight and transmitters are placed on their legs (see figure 3.9.3). This gives them enough time to imprint on their surroundings. During this week I kill or drive

away as many foxes in the hack area as I can. Mammalian predators are very quick to catch young falcons at this stage, even in the middle of the day. The transmitters are all hermetically sealed, painted in individual colors (including the antenna) and have a life of 60 days. At dawn the next day, sufficient food is tied to the hackboard in front of the window to last the branching falcons for three days. The window is then opened from below using draw-cords. The behavior of the young falcons is monitored by radio and field-glasses from 300 meters or so.

We have found that the best hack period is about 14 or so days. This is long enough for them to become hard-penned and to build muscle and generally develop the sturdy frame which is the hallmark of a hacked bird. Because there are several of them they get flying experience by playing and chasing each other. Also they pull leaves from the tops of trees. But they don't wander far, seldom more than 1–2 kilometers and they don't do much chasing of prey. Occasionally a bird will kill early, in a week or ten days, but normally there is no serious chasing in the first three weeks so the hawks don't get disappointed or too orientated toward selfhunting. But after three weeks the situation can change almost overnight and it is not safe to leave them out. I cannot understand how people reckon to manage 4–5 week hacks. By this time my birds are away almost all the time and although they may come back every day or two they seldom come in at all to the hackboard. I know this because sometimes we put wild peregrine chicks out with ours to be returned to the wild following some incident with their own nests. We always pinpoint all hack birds at dawn, and again once or twice during the day, and again at dusk, making sure that they are roosting up off the ground away from foxes and cats. After two weeks of good flying at hack they have gained most of the flying skills they need, but still need 2–3 weeks to mature mentally. They do not need to be loose at hack during this period, because of the risk that they will disperse; they just need time, untouched by humans, to grow up mentally.

When the birds come in from hack their transmitters and hack bells are removed. These hack bells are just light bells to help us locate the birds and to identify the falcons as domestic ones in case somebody should be tempted to shoot them. We then turn them away into a big flight pen for a further 2–3 weeks in groups of up to 20 falcons. This completes the mental maturation process; when they come out they are mentally ready for hunting for their own food and no longer have the juvenile urge of looking for a parent figure. They never scream at humans.

On catching up from the big pen, a tailmount and anklets are fitted and each bird is then made to the hood, fist, and lure, being back on the wing after ten to twelve days, depending on the weather. We prefer to fly them free first at the hack ground. Then, if any of them have a "technical hitch" they are on their home ground and won't go far. As soon as another bird is put up, the wanderer returns. After about ten days on the wing generally getting fitter and more reliable in the routine of trained birds, they are ready for entering at crows or rooks.

Hacking can be used to teach a falcon to home and some of them pick this up very quickly. All of my New Zealanders have been homers but now that we have telemetry to aid us homing tends to be more of a nuisance than a blessing. A falcon on the loose at home can cause a lot of damage before you can get there.

Accipiters are best not hacked except in extreme cases of aggression. Hacking reduces the bond with the falconer which is the last thing one wants to happen with accipiters. Buzzards do not benefit very much from hack; some become confirmed wormeaters and camp scroungers.

I enjoy hacking time. I like to be up at dawn watching the youngsters waking up and tipping over in the wind trying to scratch the last fluff off. Then one by one they launch uncertainly into the wind, mounting higher and higher on different levels before turning downwind with panic written all over their faces. A few short days later they are full of confidence, scything around the sky, sneaking between the air molecules as they pierce the wind which before had battered them back down. Even a biologist is allowed a romantic streak.

5.3 Imprinting and the tame hack

Once the imprinting process is broadly understood (see section 4.7), then it is possible to produce a bird imprinted on humans in some ways and not in others, as discussed in 4.17. This is normally achieved by hand-rearing birds from hatching onwards, either alone or in groups. As soon as the chick is capable of picking up its own minced food from a bowl, hand feeding is discontinued. From

then on, the aim is to familiarize and imprint the bird on all aspects to do with humans except feeding. We wish to discourage the idea that humans are parents and encourage the youngster to mature mentally and not remain in permanent adolescence, screaming for food from a parent figure rather than catching its own. We put the young bird in a large, clear-sided imprinting box. Taped on the floor and lower sides is disposable brown paper to catch the worst of the mutes. The chick itself is placed on a shallow box or tray of pea-gravel with its dish of food. In this way the chick can see what is going on and be in the center of human activity, without risk of being trodden on or expelled by a house-proud spouse. It is taken out of the box frequently for handling, sitting on laps and so on, and hooded with a large hood. It is never openly offered food; it is always dumped near a dish of food ready waiting. Once it can pull for itself it is fed always on the lure and soon learns to run across the lawn for the lure, taking care that a long line is used so that the human is out of the picture.

As the chick grows older, it is fitted with anklets (see 3.2) and a leg transmitter (figure 3.9.1). Soon it is almost ready to fly. It is clear of fluff except a few "last stars of childhood" on its head. We leave the imprints on the long staffroom windowsill upstairs overlooking the valley and they eventually fledge from there. Each night, if they haven't come back in, we either retrieve them with a lure, or make sure they are safe and leave them until the morning. Our birds usually go and join in with others at wild hack, this improves their flying. Otherwise they need to be hacked for 3–4 weeks to become as proficient as the wild hacked ones are in half that time. The reason for this is that the imprints are slower to mature mentally and tend to fly with their brakes on. They have to get properly through this stage until they are flying boldly "out of their shoulders." Our hack sites are all very windy, and this is essential for the birds to learn to cope with stormy weather. Calm, sheltered hack sites achieve little.

Other falconers hack their imprints from a vehicle or for a shorter period, such as two hours per day. Obviously one has to use a system which fits the individual circumstances. It may not be safe to hack from home. Birds which are intended solely for breeding do not need to be hacked. I prefer to hack them and fly them at least to the lure for their first autumn. It develops their physique and character and enables me to check that they are really A1 physically. It also means they can be flown again later in life if needed, whereas a bird which has not been flown in its first season seldom flies well if trained later.

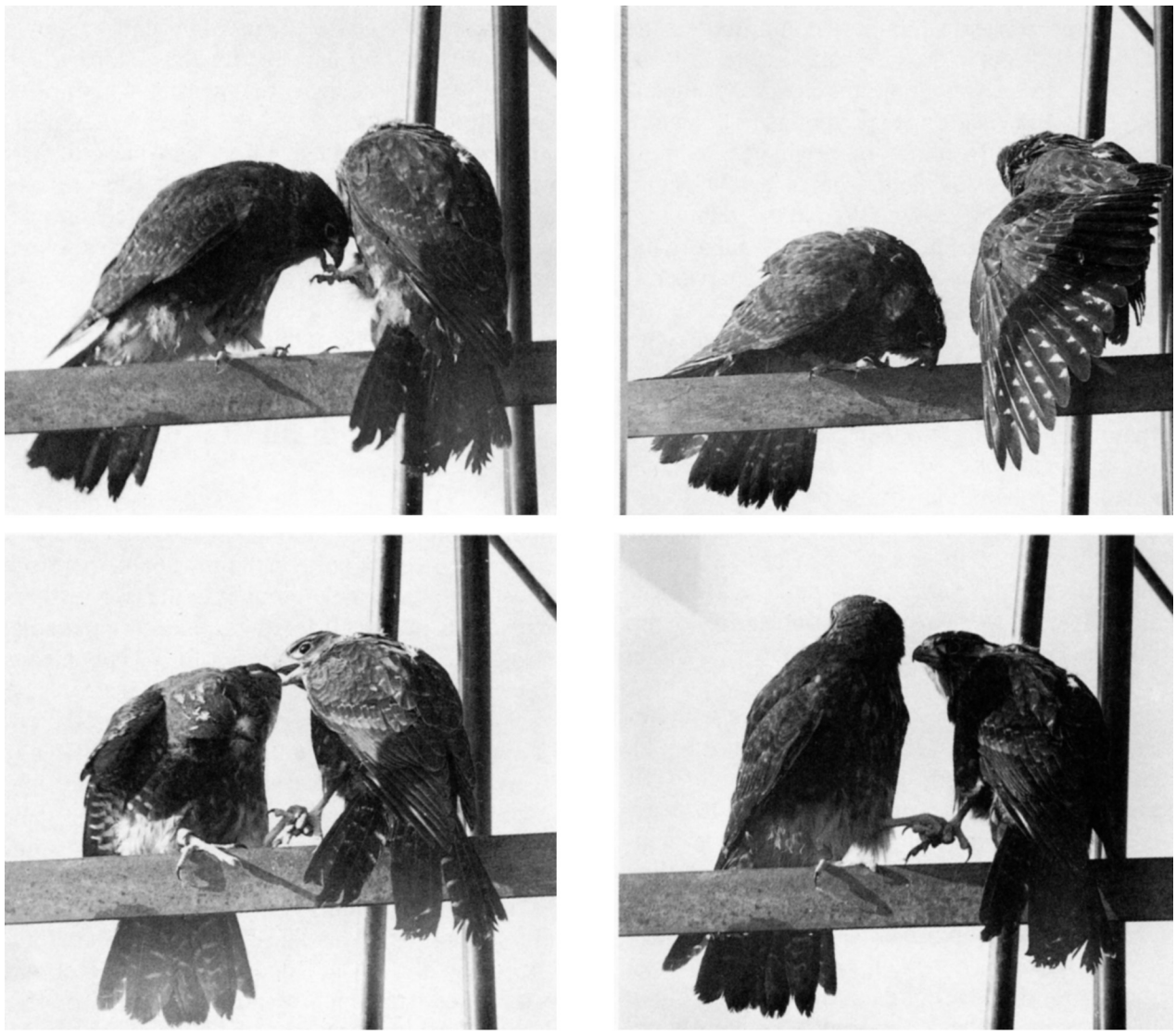
From being hooded, lured, and hacked, it is just a short step in the youngster's education to start catching game. For falcons destined for pursuit flights, it is fun to rear several together so that they can be flown incasts. It is a lot of work to achieve a good lot of quiet, well-mannered, easy-hooding, skilled flyers, but once they are entered one starts to harvest the reward.

5.4 Kitting out and taking in hand

When taken in hand, the bird is fitted out with simple anklets and a tailbell. New Zealanders and accipiters are quite hard on their gear and therefore we usually attach the tailmount to the two feathers next to the two deck feathers, one on each side, taking care that the tail can fan fully. This means the weight is spread over four feathers (see 3.2 and 3.5). We normally put a sleeve or tape on the tail for the first two weeks until she has settled down.

When the hawk iscast we also measure and photograph her properly (see 2.4), check her identification and take a blood sample. This is split, labelled, and stored (see 2.29) for future use as a DNA source. The bird is also checked over to be sure she is in full health. Training and handling will inevitably put her under some physical and mental pressure which could fan the flames of a disease. During measuring, the head width can be used as a basis for selecting a hood, either by making one up from Slijper's Canon or by using a blocked hood of that size (see Appendix 2).

Provided that she cancast through the hood, and is fat and in good health, she is best left hooded quietly for 48 hours. The least traumatic way to man her is to tie her to a perch in a quiet part of the garden where nothing can go behind her and where she can see what is going on from a distance. Most of the day will be spent on the ground, picking at jesses and generally getting used to everything. Go past her (not toward her) every hour or so, putting a tidbit on the block as quietly as you can, and then retire. If she sprawls, or ignores the tidbit, or flicks it away, she is probably still too high to do anything with. If she hops up onto the block and eats it, you are on your way. In the evening, preferably once it is dark, make in as gently as you can, hood her up and put her in her night quarters. Repeat this



Putting youngsters out together at time hack helps to teach them the social graces.

Old birds at tame hack may spend hours dozing and preening rather than flying about.

the next day and the next until she anticipates your approach with a positive attitude and starts to take food from your hand. At the same time, stay nearer as she feeds. You can start her on a few tirings, such as a juicy pigeon wing, which she can pull at by her block with you lying near her giving her extra tidbits from the glove. She will then come naturally to feeding on the fist and stepping onto the fist. You have sneaked into her life without confrontation. If, on the other hand, you attempt the old-fashioned approach to manning by putting her on your fist and carrying her about you will give her a lot of negative conditioning at the start which will take further work to cancel out. You also risk injuring her leg and hip joints, her leg scales, and her feathers. Remember, the ends of her long bones are not yet fully fused; she is still very delicate at this stage.

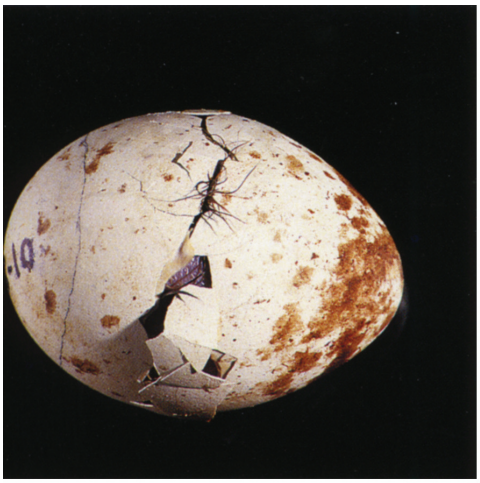
If she had been on her own in her pen you could have reduced her weight gently for a few days before catching her up. But then you would not have known her fat weight or been able to check her health first.

5.5 Manning and basic training

When the hawk was young, she gradually developed a fear response to all unfamiliar objects which were not part of her family routine (see 4.10). This blanket of fear excluded man and all his works from her world. Manning is the process whereby the handler sneaks himself inside this blanket to join the hawk in her world. He may bring some aspects of his own world along with him. Of course, if the hawk was raised in such a way that she has no fear of man (see 5.3) then no manning is needed. Accipiters are among the most fearful of hawks and stress for them in captivity can lead to diabetes, aspergillosis and other ailments. Social imprinting is often the best solution for this group.

Until this barrier of fear between hawk and man is removed, she will not be receptive to further training.

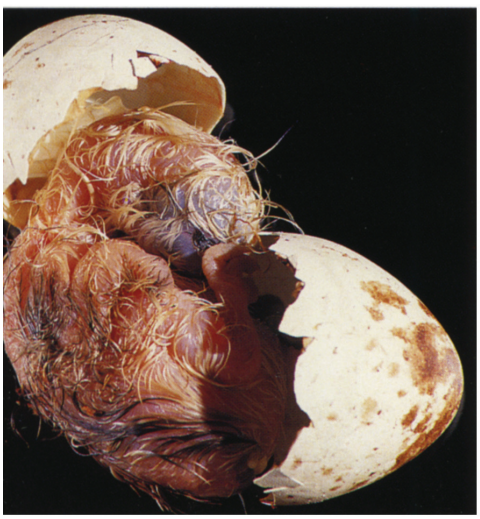
Traditional manning was an exercise in overcoming the fear response by using habituation. The hawk was carried around day after day on somebody's fist until it ignored stimuli which at first had scared it. Many trainers didn't even link the habituation with positive reinforcement or appetite motivation. The result was a system which worked but was extremely inefficient both in effort put in and in the quality of the trained bird. It was also needlessly stressful for the bird. Such birds often needed an hour of manning before being flown at quarry and, if lost in the field, were often unapproachable within 24 hours. Modern manning relies less on habituation and more on the creation and reinforcement of pleasant associations of the falconer with food. This system is faster and more positive than habituation which simply teaches the



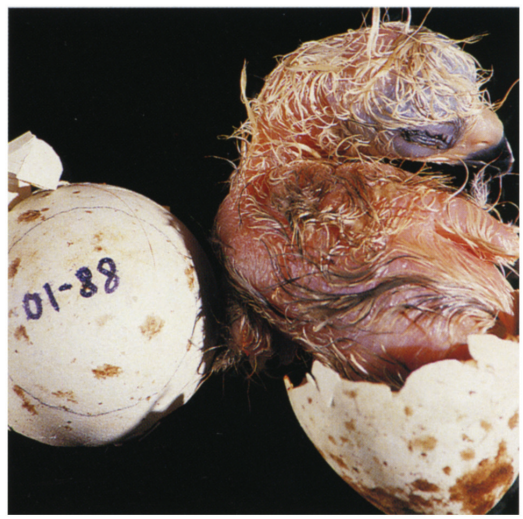
A

B

C



D



E

F

A - F A Welsh red kite chick cuts around the shell and kicks itself free.
Photos: Seth Anthony

G

G This young chick is one of 47 chicks returned to the wild in Wales and England as part of the program to help kites.

A

B

A The hood should just clear the angle of the beak.
Photo: Seth Anthony

B These chicks have been fostered on to a pair of white gyr/altai sakers who do not like being photographed. *Photo: Martyn Paterson*

C A bunch of baby gyr hybrids and kites. What will their futures be?

D Fledgling sakers in Kazakhstan have been fitted with back pack radio tags to monitor their dispersal, behavior, and return from migration.
Photo: Dr. R. E. Kenward

C

D