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## CHAPTER 2

# Housing, Management and Care

### Adequate Housing

Adequate housing represents a crucial part of what is needed for success in the bird fancy. A major reason is that good housing promotes proper environmental temperature, an important factor for breeding exotics, particularly finches.

Altogether, there are about 9700 species of birds in the world, and during the millennia they have become adapted to the conditions under which they have to live and raise their young. One major environmental factor that has affected the development of birds is warmth, and adaptations were made to provide proper protection against bitter cold or extreme heat. Penguins, for example, have a thick layer of fat that protects against cold and stores energy on which the birds can draw if it is necessary to survive for a time without food. By contrast, the tender exotics that live in the tropics have little to protect themselves against cold, and they must take in food frequently to maintain their body temperature.

One of the reasons why some fanciers lose their small exotics in winter is that they don't sufficiently realize that at that time of year there are at least 14 hours of darkness during which the birds can't eat. As a result, they cannot maintain their body temperature. Their crops are empty in the morning, and the cause of their death is often starvation. The solution is to provide several hours of artificial light in the evening, remembering, however, that a bird needs 10 to 12 hours of darkness each day to ensure adequate rest (sleep). However, since many birds in the wild, where there is never complete darkness, sometimes look for food or just fly about a little at night, it is essential that birds in

captivity have this same possibility. Therefore a small night light should be kept burning.

It doesn't take any special gadgetry to supply exotics with the environmental temperature they need. If these birds are properly acclimatized, they can live and breed under almost any climatic condition. And we must add that although most birds can't stand being exposed to direct, bright sunlight, this doesn't mean that they can't withstand high temperatures. It is quite hot in most tropical areas, even in the shade of trees and shrubs. This heat is often accompanied by a very dry atmosphere that can't be compared with the hot, humid weather we experience here during a summer heat wave. In most instances, reports of successful breeding of difficult birds indicate that the weather during the breeding season was exceptionally hot.

The body temperature of birds is about 10°F (5.6°C) higher than that of humans. All in all, we must create a situation for exotic finches that closely parallels the weather in their land of origin. Since in many areas we ordinarily don't experience hot spells that last more than a few weeks, we must find ways to create and maintain a high daytime temperature. Night temperature is not as important, since even in the tropics, this can fall quite a bit.

### What's the best way to go about this?

One way is to set up a bird room with a thermostatically controlled heating system and electric ventilators. But the average breeder can't afford this level of luxury. The most available source of heat is the sun, and the facility for raising birds

should be arranged so that maximum use is made of sunlight. The facility should not be too large, because a large volume of air is difficult to heat; also, heat is lost quickly if the surface area of the floor, walls, and ceiling is relatively large when compared to the volume of air the room contains. A space of about 12 ft. x 9 ft. x 6 ft. (approx. 4 m x 3 m x 2 m) is convenient and simple to heat. In a room this size, you can install a reasonable number of walk-in flight cages with, if possible, access to outside aviaries.

The building should be oriented with the front facing south, so that sunshine can warm it as long as possible. Also, the birds themselves enjoy the sun. It is amazing how much the indoor temperature can rise if exposed to even the relatively weak rays of the winter sun. If you have a bird house that uses available sunlight effectively, you then need to find a method to retain heat when the sun doesn't shine. It is a matter of proper insulation. There are several types of insulation available on the market to put on or between the walls. Yet, a basic requirement is that there is enough space between the outside and inside wall to retain a proper amount of still air. Pay special attention to windows. They are good to have, but if not made from double glass, lose heat easily. Therefore, install double glassed windows. A properly fitted door is also important for retaining heat and avoiding drafts.

A second important factor is proper ventilation. With higher temperatures, the atmosphere turns stale more quickly without a constant supply of fresh air. Air therefore needs to be circulated more frequently in the summer than in the winter, especially with an eye to retaining warmth in winter. The simplest method of ventilation is to have slots for air intake at the bottom on all four sides, with an exhaust slot in the roof, properly protected against rain. The slot should be closable with a slide so that the air flow can be regulated. The slots open to the wind should be closed immediately and the others should be completely opened. The openings should be covered with a fine, strong mesh to keep vermin out.

It is also essential to maintain proper heat and ventilation in winter if you want to keep your birds in good condition and in good health.

Heating, however, should not be overdone. The major purpose of a high temperature is to stimulate birds to breed, and that, of course, is not advisable in winter, anyway.

The best way to avoid problems with heat is to retain an inside temperature between 65–82°F (18–28°C), plus access to an open walk-in flight, so that the birds can choose for themselves. Even if there is much to attract the birds to the outside flight, the higher temperature inside will draw them there when necessary.

High temperatures have some drawbacks, but these can be overcome. First, you need to guard against food spoilage, particularly egg foods such as rearing foods, nectar, and such ready-to-eat foods as dead insects. Green food wilts fast and dries out, so provide these items in small quantities and replace them often.

Another factor is that water evaporates more rapidly in higher temperatures. We have found that replacing water early in the morning and late in the afternoon is usually adequate. We also recommend automatic waterers, called water bottles in the pet trade, which actually lose very little water through evaporation. Another way to reduce evaporation is to buy chick waterers, as they hold more water; in these utensils, however, never put more than 2 in. (5 cm) of water as some birds, while sticking their head through the waterer's opening, manage to drown themselves!

Birds don't have sweat glands in the skin, like humans. They will show you when they are sweltering by sitting with open beaks and drooping wings. If you see these signs, you must take steps immediately to lower the temperature. Actually, installing a reliable thermometer is useful for avoiding such stressful situations. Hang the thermometer at the height of the main perches, because the temperature can vary considerably between the floor and the ceiling. Also, remember to disturb birds as little as possible when the temperature is high, because body movements cause body temperature to rise, which can have tragic results.

If you need to catch birds in warm weather, do this early in the morning, or in the evening when it is cooler. Remember that heat dries out the air. Even though the humidity should be kept low for

most finch species (approximately 55%), it pays to sprinkle water on the floor once or twice daily. Or you can place safe varieties of potted plants nearby and keep them moist to prevent the air from drying out.

Proper attention to environmental factors is extremely important, especially if you want to breed estrildines. Observe and experiment with the birds you want to raise, and you will be able to breed a variety of finch species. We want to urge you to progress from a keeper to a breeder of finches. Unless you've experienced it, it's hard to imagine how fascinating it is to observe courtship behavior and nest building, and how exciting it is to watch the laying of the eggs, the feeding of young, and the busy activities of enthusiastic bird parents.

Keep good notes and records to supplement published information about your birds. You will find an extensive list of reference books in the back of this book to discover all you need to know.

Well prepared and equipped, you will be able to extend the fellowship of breeders that are developing a good supply of birds independent of importation, which came to an almost complete stand-still recently. Responsible breeding in captivity can help prevent certain bird species from disappearing completely from the face of the earth. For example, many waxbills and Australian grassfinches are becoming increasingly popular, showing that the aviculturist can accomplish a great deal, when considering that importations of wild-caught specimens have been cut off for many years—since 1997 and 1964, respectively.

### **Acclimatizing Imports (in case bans will be lifted or changed)**

The importation of wild-caught finches for the pet trade has come to an almost complete stop; however, the importation of captive-bred estrildid finches from Europe and Japan is increasing rapidly in order to comply with the demand.

The cost of imported, captive-bred birds today is determined to a large degree by the cost of quarantine after their arrival in America. Government officials deem it necessary that every bird entering the country must be placed into quarantine for at least 30 days, whether it is an exotic finch or a par-

rot. The major concern is exotic Newcastle disease (VVND - Velogenic Viscerotropic Newcastle), a dreaded virus infection which several years ago caused major losses among chickens. There is no doubt that the poultry industry suffered millions of dollars in losses, so that it makes sense that the government releases imports into the domestic trade only after they have been medically examined and found to be free of this infection. Birds that die during quarantine are carefully examined and the cause of death is precisely determined. It is a system that works satisfactorily even though it raises opposition from time to time. There can be no doubt that it's important to bring healthy, virus-free birds into the domestic trade channels. And yes, it is expensive too, when you add all the direct and indirect costs involved, but much cheaper than acquiring an infected bird, and losing an entire collection.

While on the subject of regulations, be aware that in many places you need a permit or license to keep birds. There are neighborhood covenants that flatly prohibit the keeping of any pet whatsoever. There are also localities that limit the number of birds that you may keep in a residential neighborhood. Still other locations require that you get an occupational license before you can sell birds, even if you raise them yourself. Further, local ordinances may require commercial zoning if you want to sell birds. Some places permit the sale of birds, but not any advertisement on your property offering "Birds For Sale." If you live in one of these places, you have to place ads in the local newspaper, which is usually more effective, anyway. There are states requiring a state license to sell birds, even those you've raised yourself. Be aware of ordinances of this type. It may seem burdensome, but unless you stay informed, you may get into trouble sooner or later, which can be quite costly. Make inquiries from the local government and join a local bird club. Your fellow members will certainly provide you with full details about what may and may not be done. If they can't provide accurate information (and this has occurred far too often!), insist that the leadership inform itself fully and immediately on any restrictions and licenses that apply. Then insist also that all members be informed in detail on the existing sit-

uation. This approach will benefit the entire hobby.

If you do acquire imported, wild-caught birds, via legal permits or otherwise, it is important to give attention to their proper acclimatization. Birds arriving from other countries have been exposed to all manner of discomfort and danger during the trip. They will also be slow in becoming accustomed to new food sources, utensils, housing, etc.

Never house newly arrived birds with earlier arrivals. If they're housed in the same quarters, they could spread disease. Place the imports in separate, roomy cages and, if possible, house males and females separately. The best type of cage for this purpose is the so-called box cage that is well protected on all sides. Place an infrared lamp near the front. It will benefit those birds that "don't look so great" after a long, tiring journey, and it will also help those that appear well and in good condition. Place the lamp about 24 in. (61 cm) from the front of the cage and set things up so that the bird can move away from the heat if it so desires.

Almost all finches love panicum millet. Provide a dish of the small millet varieties, canary grass seed (= white seed), weed and grass seed, and niger seed. For drinking, provide tap water which has been boiled and allowed to cool. A disinfectant should be dissolved in the water, following the advice of your local avian veterinarian. We have had consistent success with fresh, cooled chamomile tea, which has a healthy quality which helps to offset mild intestinal and stomach disorders. We make it up fresh twice a day, and in the evening we replace it with the boiled and then cooled tap water with disinfectant. Remember that chamomile tea turns sour quickly in warm weather; that's why we make it fresh twice a day and do not allow it to sit in the cage overnight.

Place drinking cups in a location where no droppings can fall into the water. Overlooking this precaution can obviously lead to a lot of trouble.

After two weeks, we start providing only tap water. This is still boiled and then cooled to room temperature, of course. In areas with hard water, we suggest using spring water, which can be purchased in the super market or drug store.

Recently imported birds should not be allowed to bathe during the first two weeks. Wait till they perch healthy and lively before letting them bathe. Once again, we provide tap water at room temperature for this purpose and add to it one-third part of chamomile tea cooled to the same temperature. We do this because birds like to drink before they bathe. After a week, you can omit the chamomile tea. Chamomile tea also has a healing function in the bath water. If there are any patches of inflamed skin, which may be hidden from our view by the feathers, they will disappear when exposed to chamomile tea.

Since most finches feed, at least in part, on the ground, recently arrived birds will instinctively look for food on the floor. So when you provide food, sprinkle some on the floor and hang the seed dishes low in the cage or aviary, close to the main perches. Furnish drinking water in flat, earthenware dishes; the rim should be somewhat rough so that the birds won't fall into the water. Preferably, cover the dishes with wire mesh to prevent the birds from bathing in the drinking water.

To avoid intestinal upsets, don't feed new birds any greens or fortified food for the first four days. Sprouted seed, however, will be greatly appreciated.

Approximately one week after the arrival of the birds, scatter some sand on the floor of the cage. The sand should not be too sharp, and should be replaced daily. Or else, use fine oyster-shell grit. It can happen that recently imported birds take in too much sand or grit. If so, cover the floor with paper (not newspaper) because too large an intake of sand or grit can cause all kinds of stomach and intestinal disorders, as well as crop impaction. This can be prevented by giving the birds grit in an open dish once a week and letting them pick whatever they like for one hour only.

Keep the cage scrupulously clean, and wash all utensils at least once a day with hot water and then disinfect them with Clorox, Purex (1:32 solution; half a cup per gallon of water), One-Stroke, Environ, or Lysol.

Watch carefully for any sign of watery droppings, and if noticed, take immediate action. This symptom can be life threatening for birds. Add a 5-10% glucose solution to the drinking water and

## Suggestions for a group aviary

- 1.** Recommended for beginners who want a reasonable chance to breed successfully:

- British birds (*eg. European goldfinch, serin, linnet*)
- canary
- cardinal species
- crimson finch
- golden sparrow
- painted quail
- Pekin robin
- spice finch
- zebra finch

Keep all these birds in pairs and don't plan two pairs of any sort in the same aviary (to avoid constant bickering); three or more couples are okay.

- 2.** Recommended for beginners who are not looking for immediate breeding results:

- cardinal species
- cut-throat finch
- doves (*eg. diamond dove*)
- Java sparrow (*eg. white, gray, pied*)
- painted quail
- weavers (*the larger species*)
- whydahs (*the larger species*)

A collection of this type could produce some breeding results, despite the description we gave it. Several species will breed satisfactorily, if they get the opportunity.

- 3.** Recommended for somewhat experienced hobbyists:

- Australian finches and parrot finches
- canaries (*for song and color*)
- Chinese painted quail
- gray finch
- Pekin robin
- red-tailed lavender
- waxbills

- 4.** Also recommended for somewhat experienced hobbyists:

- Australian finches and parrot finches
- Bengalese (*in several color mutations*)
- black-headed munia
- Chinese painted quail

- diamond dove (*or similar birds*)
- gray-headed silverbill
- yellow-faced grassquit
- zebra finch (*in several colors*)

- 5.** Recommended for anyone who likes a well-stocked group aviary:

- Bengalese
- cherry finch
- Chinese painted quail
- common waxbill
- crimson-rumped waxbill
- golden-breasted waxbill
- gray finch
- gray-headed silverbill
- green avadavat
- green-singing finch  
(*Note, however, that this bird cannot be kept in an aviary also housing a pair of gray finches; these two species are almost always on the brink of battle with one another.*)
- Indian silverbill
- nun species (*the three popular species, black-headed, tricolored and white-headed, can be placed together without problems*)
- orange-checked waxbill
- red-billed firefinch
- red-checked cordon bleu
- red-eared waxbill
- red-tailed lavender
- spice finch
- star finch
- strawberry finch
- violet-eared waxbill
- zebra finches (*in various color mutations*)

- 6.** Recommended for the experienced hobbyist:

- African glossy starling
- British birds
- bulbul species
- cardinal species
- crimson finch
- doves (*the large species*)
- pagoda starling
- Pekin robin
- quail (*the larger species*)
- shama thrush (*and other thrush species*)
- song thrush
- weaver species (*only the larger species*)
- whydah species (*only the larger species*)

- 7.** Recommended for hobbyists who prize song and color (while maintaining reasonable chances for breeding):

- Bengalese (*in several color mutations*)
- black-headed canary
- British birds
- doves (*only small species*)
- golden sparrow
- Java sparrow
- saffron finch
- weaver and whydah species (*only the larger ones*)
- yellow-faced grassquit

- 8.** Recommended for hobbyists wanting to combine song, color, and breeding:

- Bengalese (*in several color mutations*)
- black-headed canary
- black-throated finch
- cherry finch
- Cuban grassquit  
(*Note, however, that this bird should not be placed in the same quarters with the yellow-faced grassquit, even if there is more than enough space; sooner or later they'll start a "war."*)
- diamond sparrow
- indigo bunting
- Java bunting
- lazuli bunting
- long-tailed grass finch  
(*Note, however, that among this species there can be couples that are pugnacious, so it pays to watch them.*)
- nun species
- quail (*various species*)
- red-headed finch
- red-winged pytilia
- saffron finch
- weavers and whydah species
- zebra finch (*various mutations*)

The listed combinations reflect our personal preferences. They will however, serve as a guide for creating your own collection, taking into account the size of the aviary.