Before we get into the serious task of hand-feeding Estrildid Finches, it must be stated here that this is not a procedure we recommend for the acquisition of a pet finch to sit on your finger, or as a serious last resort approach to finch-breeding, but as a serious, last resort effort to propagate birds which would otherwise be lost. As with most other endeavors in life, having the right tools for the right job is very important, and we will list them here.

1. An incubator/brooder. This may seem a simple task, but make sure you get one that is well-designed for finches. For example, a dry air environment which would properly hatch a Kulikoro Firefinch or a Violet-eared Waxbill, would most likely prove disastrous for such moisture-loving species as Black-capped Waxbills and Peale’s Parrot Finches, as we regrettably discovered. If you are experiencing an unusually large number of embryos dying in the shell, it may not be the fault of your Societies, but rather due to the atmospheric conditions of the foster parents’ environment. It is for this reason we have two separate bird room climates: a hot, dry grassland room, which is wonderful for such species as Pictorella and Painted Finches, and a cooler, tropical bird room which is suitable for such birds as Crimson Finches and appropriate Mannikins. These eggs are fostered to Society Finches which are kept in the same environment as the parents, thereby providing the proper conditions for incubating and hatching. Therefore, make sure you get a unit that will cover the full spectrum of your finch needs. We use the Animal Intensive Care Unit manufactured by Animal Care Products. It includes an air filter, humidity control tray, and thermostatically-controlled heater. We found it superb for finches.

2. An assortment of hand-feeding syringes - 1/2 ml and 1 ml size. We do not recommend the monoject syringe usually supplied by veterinarians, as we feel these are inferior and often clog up. Rather, we use the Exacta/med dispenser, manufactured in Denmark. These are very well designed and seem to last forever.

3. A box of toothpicks. We like the DALE R. THOMPSON
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Older chicks, like these well-feathered red-headed mutation Crimson-winged Auroras, prefer to perch while being handfed.

wooden type that are flat on one end and pointed on the other.

4. A good hand-feeding formula for finches. We found the Roudybush Handfeeding Formula 3 excellent for the job.

5. A container of soybean protein isolate powder (optional).

Now for a little bit of work. Take one of your small 1/2 ml syringes and stick a small pin halfway into the opening. Next, get a butter knife and heat it over the stove for a minute or so. Then, press the knife around the plastic next to the pin. The plastic will melt like butter and can be very easily shaped to close around the pin, leaving a very small opening when the pin is removed. The purpose here is to make a syringe with a smaller diameter opening, so one can use a syringe for a finch younger than one would ordinarily be able to. We do not recommend the use of crop feeders.

If one's birds refuse to feed their own, and one does not have Society Finches which are reliable, then it seems to be a dangerous practice to leave these eggs for the birds to incubate for, at hatching, these babies could easily be lost. It is for this reason we recommend placing the eggs in the incubator at a temperature of 96 to 98°F, and turned at least once every four hours, except, of course, at night when you’re sleeping. With this procedure, we’ve had a very good hatch rate, which rivals or even exceeds our Society Finches.

When the eggs are getting ready to hatch, they will appear blotchy, and sometimes even the embryo’s movement within the shell can be observed. Finches are well-designed for the job of hatching, and we do not recommend helping them. However, when actually hatched, a piece of shell or membrane may be clinging to their head or another part of their anatomy, and it is quite safe to pull this gently away.

Many finches will beg even before they are properly hatched, and it is at this point we will separate the men from the boys, the women from the girls, or more precisely, the handfeeders from the also-rans.

Newly hatched birds should be kept in the incubator at the same temperature at which they were
hatched, in a small bowl lined with a paper towel. Under no circumstances remove the bird from the incubator. Now rush to your shelves, drag out that bag of Roudybush, your container of soybean protein powder, and mix approximately half and half in a small pot. Add water and stir until you get a mixture the consistency of a mushy pudding. Heat, stirring constantly, until the mixture is nice and warm. Whether you choose to mix in the protein isolate or not is up to you, but we believe the extra protein is vital at this young age.

Once your mixture is warm, we recommend sticking your finger into it for a while and leaving it there. If you burn your finger, chances are you will also burn the bird. When you have the right temperature, put your adapted syringe into the mixture, and suck some up into the tube. Do not pull the syringe out, but leave it in the mixture for approximately 10 seconds, allowing the inside and outside of the syringe to become warm.

Eject the formula, stick it in a new location, and suck up approximately .05 ml. Remember, these birds are very tiny, and the less food you have in your syringe at this stage the less likely you are to overfeed and risk aspiration. Pull the syringe from the formula, wipe off the tip, and rush over to your incubator. Do not hold the syringe in the typical manner with your thumb on the plunger, but rather with your index finger, middle finger, and thumb around the tube, with the plunger pressed lightly against the palm of your hand. When the time comes to feed, gently squeeze. You will find that this technique gives you much more control.

Estrildid finches have a confusing array of begging postures. Some, such as the Black-capped Waxbills, lift their head up, hold it still, and open their mouth wide — a very easy bird to feed. Others, such as Violet-eared Waxbills and especially Crimson-winged Auroras, sway their heads from side to side, making feeding these birds a difficult proposition — after all, a moving target is hard to hit. We have found it helpful to gently restrain their bodies with your thumb and to restrict their head movements with your index finger. This gives you a better chance at ‘‘hitting’’ your target. Remember, while you’re doing all this, the food at the extreme end of the syringe tip, which is what the chick will receive, has already cooled. Nothing will more effectively stop a chick from begging than cold formula, thereby guaranteeing death. So here is an additional procedure to complicate the issue. Immediately before you feed the chick, squeeze a small amount of formula from the tip onto your hand that is restraining the chick, thereby forcing the warmer formula in the reservoir into the tip, and then immediately feed. A healthy chick will feed ravenously. But remember their crops are very small, and a very small amount of formula is needed.

Remember to allow the chick to swallow completely and resume begging before attempting to feed the next portion. A chick that is feeding is not breathing, so proceed accordingly, with caution. This is a delicate, stressful operation, but you will be surprised at how proficient you will become, since you will have to repeat this procedure every hour.

You may suddenly realize that the tip of your syringe is still too large. Don’t panic! Grab one of your toothpicks, the pot of feeding formula, and rush back to your incubator. With the flat end of a toothpick, take out a small dab of formula and place it into the mouth of the begging chick, formula side of the toothpick facing the bottom jaw. The chick should grab the toothpick as he licks off the formula, he will appear to be swallowing the toothpick. Don’t panic! After approximately two or three seconds gently pull the toothpick out of his mouth. If the chick is still begging and the crop looks less than full, repeat the procedure.

The best way to check the crop at this age is that a good, full crop will appear as a fat neck. You will be able to see the formula beneath the skin. In an empty crop, the neck will appear flabby. This is a judgment call, and experience, as always, is the best teacher. It is better to underfeed than overfeed. When in doubt, leave the chick alone and try 15 minutes later. Some chicks with full crops will still continue to beg, so don’t rely entirely upon the begging reflex as an indicator.

As mentioned before, newborn chicks should be fed every hour, except for a sleep period, which is necessary to allow the crop to empty completely, thereby avoiding sour crop and other problems. We do our last feeding at 11:30 p.m. and pick it up again between 6:00 and 7:00 a.m. Remember that cleanliness is extremely important at this stage. Very young chicks are very susceptible to bacterial and other infections. Always refrigerate any unused portions of formula in a covered container (this could be the pot you cooked it in), if you’re not making up fresh each time. Never save any prepared formula overnight, unless you have kept a master supply of daily portions in the freezer.

When you’ve completed your last feeding of the night, make sure you turn the lights out in the room which contains the incubator. For the sake of convenience, we’ll assume this is the kitchen. In our observation, as long as there is light around the chick, the crop will empty out quicker, and he will start to beg again. This could prove to be disastrous. But in a darkened environment, the chick will fall asleep and he will be content until morning.

At this point, you have made it through your first day, so you are doing quite well. The first week of a chick’s life is the most critical. If you can get past this point, you can start to feel a little more confident. Here are a few things to watch out for:

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for the first week and beyond:
Formula could begin to harden around a chick's mouth. This must be removed. Gently restrain the chick and use one of your toothpicks to remove, always in strokes away from the mouth, so that the lump doesn't find its way back into the mouth, resulting in choking.

Birds do a very good job of cleaning the nest. Unfortunately, since you are now the foster parent, this job falls upon you. Depending upon the condition of the paper towel liner, the paper should be changed about four times per day for newborns. Have your paper towel pre-cut to the right size. Gently lift up the baby, with the other hand, remove the soiled paper towel and replace with the new. Never take the baby out of the incubator.

Another situation you will have to watch out for — which some get quite frequently and others not at all — is the clogging of the vent. Since the parents are not there to remove the droppings as they emerge, it is quite possible and probable that the droppings may harden around the opening, thereby causing a blockage. Be sure to check for this condition from time to time. If you observe this problem, simply restrain the chick with one hand and with the other use a toothpick or a warm, moist paper towel to soften and remove the hardened droppings. Baby birds seem to defecate often, and its condition is a good indicator of their health. If all is well, droppings will appear as a reddened crop and the amount of formula until it appears

Be very careful about keeping your formula warm and your feeding utensils immaculately clean. We generally use one feeding toothpick per day. The syringes we wash under hot water after each feeding and re-use after soaking in a bleach solution. Don't forget to wash your hands, preferably with an anti-bacterial soap. Anything on your fingers will go into the formula when you test for temperature, and from there be transmitted to the birds when feeding. Results could be disastrous.

In about a week or so, pin feathers will begin to form on the wings. Soon after that a line of pin feathers along the spine of the back, and the middle of the belly and tail feathers will appear. This will be the chick's first defense against cold. It is only when the wing feather shafts actually begin to break away, exposing the feathers, that we start to reduce the temperature in the incubator — one degree per day until we hit 80°F. Also, when the first feather shafts appear on the wings is when we begin to feed just straight Roudybush Handfeeding Formula 3.

At this pin-feather stage, birds begin to become more aware of their surroundings. One lone bird will rarely survive. The need for companionship is just as critical as the need for food. If we find the need to handfeed birds at this stage or beyond, we always make sure they have a companion. This could be their siblings or, in the presence of only one chick, we always pull a Society Finch or other species of bird at approximately the same stage of development, and handfeed them all together.

As the tail feathers grow in it becomes extremely critical that you check for blocked vents. The tail feathers may actually collect droppings, keeping the vent constantly closed. In extreme cases, we will actually cut the tail feathers off, thereby helping to remedy the condition.

When the feathers begin to appear on top of the chick's head, their beak will slow down, and you can stretch out feedings to every two hours or so.

Soon the chicks will start to hop outside their cup, and begin to explore their incubator. It is at this point you should introduce some branches so the birds can exercise their feet and wings. Our unit has small air vents along the top and
three hours or so, thereby still keeping them basically well-fed, but still the seed, reduce feedings to every even, these birds will be lost. We recommend placing these birds in an incubator, with the temperature set slightly higher than room temperature to compensate for stress. Usually these birds will not immediately accept a feeding syringe and will have to be force-fed. Cut off the end of one of your syringes at an angle to form a point. This you can use as a wedge to open the chick's beak. Gently hold the chick in one hand, his body in the palm of your hand, the bird's head restrained against your index finger, and your thumb right behind the jaw. Quickly and gently force the syringe between the jaws, and squeeze a small amount of formula into the mouth, never into the throat or crop. Wait for the chick to swallow this, and then repeat the procedure until he has had a sufficient amount. This should be done every two hours. By the third day these chicks will generally begin running toward you, having completely accepted you and the feeding syringe.

At this point, further reduce the incubator temperature gradually, until you reach room temperature. A week or so after this, remove all the birds to a small holding cage, and place on top of the incubator. The idea here is that they are finally out of the incubator, but still in similar surroundings, thereby avoiding undue stress.

When the chicks begin pecking at the seed, reduce feedings to every three hours or so, thereby still keeping them basically well-fed, but still hungry enough to want to peck at the seed. In this way, they are gradually being weaned. As the interval between feedings is increased and they start taking more and more seed, they will begin to appear to only "nibble" at the tip of the feeding syringe, and actually start to pull away from it and fly off in avoidance.

When the birds are actually self-feeding, it is very important that they learn what they are. These newly-fledged chicks must be placed with their own kind. If it is impossible to actually place them in the cage, as with aggressive species, then hook the chick's holding cage onto the cage of their own kind. In this way, some interaction can occur.

Please be aware of the fact that you will not get all of the chicks which you attempt to hand-raise. There will be losses, and you must learn to accept them.

We have found that there is absolutely no truth to the argument that chicks raised in this manner will never breed. Birds which have been hand-fed in an open bowl have gone on to breed with their own species, and build their typical species-specific nest. This is instinctual and is in no way lessened by the hand-feeding experience. It is in this manner that we have propagated many rare individuals which would have otherwise been lost.

The joy of seeing these birds accept and reproduce their own kind is certainly one of the greatest joys we have experienced in aviculture, and makes all the stress of hand-feeding worthwhile.

Sources for Products Mentioned
Animal Intensive Care Unit
Animal Care Products
3179 Hamner Ave., Suite 5
Norco, Ca. 91760
(714) 371-2465 Phone
(714) 737-8967 Fax

Roudybush Handfeeding Formula 3
Roudybush
Box 908
Templeton, Ca. 93465
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