The design of an aviary is, in my opinion, a very personal thing. Each aviary is built for the same purpose: to house birds. At the same time each aviary is built to suit an individual person's needs and requirements. This is why an aviary is so personal in nature.

For the purpose of this discussion, I will be considering the various aspects of aviary design from a breeder's requirements. A person designing an aviary for their own enjoyment will probably consider an architecturally more pleasing structure than a breeder. However, most of the key points will still apply.

Consider some of the various factors which determine how your aviary should be designed. All of the following items (and in some cases more) need to be considered:

1. Size and type of birds
2. Climate
3. Zoning
4. Budget
5. Security
6. Utilities available
7. Hobby or commercial
8. Self built or contracted
9. Future expansion

Let's briefly discuss some of these considerations.

Size of Birds

Large birds obviously require considerably more room than their smaller counterparts. A decision regarding the number of pairs of large birds (as well as which type of bird) will have to be made so that enough room will be allowed for these birds. In addition to more room, larger birds also require heavier gauge, more costly wire for their cages. Considering the extra space and cost of both the cages and cost of buying larger birds, a person may be well advised to consider breeding smaller birds.

I am assuming that the breeder is trying to make a profit by breeding birds. This point alone could be a topic for a full discussion. How many of us try to be profitable but don't sincerely do everything possible to maximize our profits? I am probably as guilty as anyone here about overfeeding my birds.

An excellent paper was presented at the 1997 IAS Convention on how to properly set-up, manage, and operate an aviary for maximum profit. It is well worth reading.

Climate

The climate that the breeder lives in will determine to a large extent the type of aviary that will be built. A person living in Canada or the Northern United States must be able to heat their building and protect their flock from the harsh environment. Even those of us who live in the southern United States sometimes have cold weather and need to consider provisions for keeping our birds warm on occasions.

Some breeders I have visited in Southern Florida also consider the cold air that comes from the north. One person who had free standing individual pens for her birds, had planted a grove of trees on the north side of her property to act as a windbreak. Another person whose birds were in a semi-enclosed building had the solid or enclosed part of his aviary facing north to block any cold wind.

Some of us live in states that are warm most of the year, but where it sometimes still snows in the winter. In this situation a breeder can wrap his breeding cages/pens with plastic during the cold months to keep the frigid air off the birds. another solution is to have an enclosed building with cages on the inside and larger flight cages on the outside of the building with an access hole through the wall which can be closed off in the winter.

Zoning

Most people don't just decide to start breeding birds. They are like myself and somehow, unknowingly, let these wonderful creatures lure them into buying more, and more, and more. Sometimes I wonder if the sirens song that Ulysses heard from the rocks wasn't really a bunch of birds!!

Eventually you end up with more birds than you ever dreamed possible and now you begin worrying about your neighbors reporting you as a nuisance. Hopefully you live in an area that is zoned agricultural, or, perhaps, there aren't any zoning restrictions, or deed restrictions, or any neighbors.

Veta, my wife, and I visited a friend in Florida. She has written an article which was published in Bird Talk.
magazine about the rigors involved in moving a large aviary to a new home because the flock outgrew its former location. Before your flock gets too big, you would be wise to consider moving if the zoning in your present location could become a problem.

**Budget**

How much money you have available to spend will determine a great deal of your aviary design. From personal experience, I can state that you will need to allow a lot of dollars in the column labeled “miscellaneous” or “unexpected expense.”

I thought I had plenty of money earmarked for a stainless steel kitchen for preparing my birds’ food. Now I am ready to set up a secondary smaller kitchen at the other end of my building and must begin buying more stainless tables and sinks. Also, I had not planned on the amount of time it takes to cut up fruit and vegetables, so a commercial food processor had to be purchased and that was several hundred dollars that wasn’t planned for.

**Self-built or Contracted**

I am fortunate that my father was not only good with his hands but was also a good teacher. He taught me how to build things with wood, lay cement block, do some plumbing, etc. He also taught me how to listen to one’s wife. Many times there are jobs that need to be done around our home, or bird shop, or bird farm, that I now am finally allowing others to do for me, for pay of course. My wife, Veta, has taught me that sometimes it’s better or more economical for me to do my job and make money and pay someone to work for me. Of course, your aviary construction may be a combination of hired labor or contracting some of the job and your doing other parts or portions for the work yourself.

**Future Expansion**

I suggest everyone plan their project with future expansion in mind. We had a 30 x 120 foot building erected and I was sure it was at least 35%-40% larger than I needed. Soon after we moved in a friend requested we keep about 20 pairs of birds for him for a few years. They ranged in size from African Greys to Green-winged Macaws. This used up a good portion of my “reserve” area. Of course, Veta and I continued to acquire birds and we grew out of room. Instead of expanding our building we decided to erect smaller buildings and make them for individual species. At the time, I had a young man working for us who was quite a good mason. Between us we erected forms, placed drains and pipes, etc., and I did the “mule” work of bringing wheel barrows of cement from the cement truck to the sites while he troweled the cement. After the floors were set I hired a contractor to erect small barn type buildings.

It wasn’t long until the two new 10 x 20 foot buildings were full and we had to put up three more identical buildings. Fortunately, we have a ten acre farm, so we still have plenty of land if more buildings are needed.
Security

Security is becoming more and more important. Nearly every month either my wife or I hear about birds being stolen. Most of you probably know of or have heard of someone who has had some of their birds stolen. Thieves even hit our own Riverbanks Zoo in Columbia, S.C., despite its relatively secure location bounded by fences, pens and security guards.

I have seen several types of attempts at security. Some people keep their birds in their house. Some are kept in a fenced yard. Others are kept in fenced yards with dogs in the yard. Some fences are electrified. Some aviaries have alarm systems and this of course, helps with security.

One of the best security systems that I have seen was owned by Richard Shubot. Some of the systems he had in place include, a 10 or 12 foot high chain link fence, ribbon or razor wire on top of the fence, trained guard dogs, security cameras, and armed guards that carried uzi machine guns.

In my opinion, one of the best security measures is to not allow visitors to your aviary. Knowing the location and physical layout and location of their target (specific birds, in this case) is some of the best information a thief can have. So don’t make it easy by inviting strangers or casual acquaintances into your aviary.

We have our farm surrounded by a six foot chainlink fence, all buildings have wireless alarm systems which include active audio monitoring. We also have Giant Schnauzers free ranging over the entire property. They practice their security training by elimination of any snakes, opossums, fox, etc that venture onto the property. I have half seriously considered putting up a sign like one I saw on an aviary I visited. It said, “Dear burglars, please leave any false teeth at home, the dogs have trouble digesting them.”

Utilities

Availability of city utilities is certain-ly an advantage, maybe while it is conven-ient to be able to tap onto city water and sewer we may become too complacent about the power supply. Our aviary is in the country and we use a bored well for our water supply, have a septic system for waste water, and have electricity supplied by the local electric company. I was fortunate to have Dr. Richard Porter show me his emergency generator system which was activated by an automatic switch gear. It made me want a similar system because we sometimes have power failures.

Recently, I purchased an Onan generator powered by propane gas that came complete with automatic switching so that if there was an interruption of electric power the switch automatically starts the generator and switches all circuits over to generator power. I bought the entire system for less than a thousand dollars at an auction of a defunct supermarket. These generator sets are designed to provide power to keep the freezers operating, so food doesn’t spoil during a power outage. We are having our electrician alter our electrical set-up to accommodate our new generator. Of prime importance to us, if we have a power outage will be our well, pump, freezers, heating system, lights, etc.

Hobby Breeding

Hobby breeding does not necessarily require a separate free standing aviary or building. A room or area in your home may be set aside for this purpose. It will still be important to be able to easily clean the area. Ventilation will also be very important. Dust and feathers sucked into the home’s cold air return system to the furnace could cause serious harm to the heat/air system. there could possibly be a fire hazard as well as a clean breathable air hazard.

Several people successfully breed birds on a commercial basis in their homes, or basements, but they have carefully prepared the areas for the birds, and themselves. Now that I think about it, I have seen some very large breeding areas in homes — or was it really in a bird house that simply had a small area set aside for human residents?