TRAINING THE IQ ZOO CHICKEN

The common barnyard chicken is a small, usually timid bird related to a number of ground- and tree-living species found in many places in the world. Chickens are omnivores; that is, they eat both plants and other animals.

The IQ ZOO uses special breeds of chickens for training. Most barnyard fowl have been selected for fast growth, meat production, and egg laying. Long life and intelligence were of no concern to the farmer. We spent many years locating long-lived, easily tameable, and intelligent breeds of chickens. One type we use is the Southern "barnyard bantam," a hardy, miniature breed of mixed ancestry, commonly raised by Southern farmers. The other breed is a special mixture of strains, mostly white Leghorn.

We begin to train chickens when they are about six months old. The chickens are feeder conditioned and given an "aptitude test" at the same time in a special device designed and built by the IQ ZOO. The birds learn the YES signal while being studied by the IQ ZOO trainers. We try to find out which chickens will make the best dancers, which will be the best baseball players or basketball players, and so on. As an example, we put a chicken in this device, which contains a flat board floor, and teach

it the YES signal. Now we wait. If the chicken very quickly starts to scratch, we can bet that this chicken will be a good dancer. When the chicken starts to scratch on the board, we give the YES signal and the chicken eats. Again we wait. And again, when the chicken scratches, we give the YES signal. Soon the chicken learns that this is what we want it to do. As a rule, most of the bantam chickens that scratch during the first part of YES training are assigned to dance training.

Another natural response we use often in our training is pulling on something that resembles a worm -- usually a plastic ring or loop. At the front of the feeder conditioning device is a small box which has a loop mounted on top. Inside the box are relays and connections which make the electric feeder work automatically as soon as the chicken tugs lightly at the loop. Also it is possible to set the device so that the chicken must pull harder and harder in order to make the feeder work (remember DIFFERENTIATION?). Often, once the chicken has learned to eat from the feeder cup and has learned the meaning of the feeder sound, as it explores, the chicken will just naturally tug on the loop. If this happens, a very slight tug will automatically work the electric feeder, and the YES sound from the feeder tells the chicken it has done the right thing.

Sometimes the trainer is also standing by with a pushbutton to work the feeder. If the chicken doesn't quite pull the loop hard enough, but touches or even looks at the loop, the trainer may push the button to tell the chicken YES. To make things happen faster, the trainer may fasten a few grains of feed on the loop with a piece of plastic tape. This usually gets the chicken's attention and causes it to start pulling at first at the tape with the grain, and then at the loop itself. Now we ask the chicken to pull harder and harder. Birds who cannot pull hard enough get a FAIL on this lesson and go on to something else.

Another act we test for in this aptitude test device is the Basketball act, where the bird hits at a ping-pong

ball raised over a column of air and attempts to knock the ball into a basketball goal. To test for this behavior, we suspend a ping-pong ball over an opening in front of the testing chamber. If the bird strikes quickly at the ping-pong ball, the chances are high that this chicken will be a good basketball player. If the bird does not strike right away, we can tape a few grains of feed to that surface of the ball which faces the chicken. This is usually all that is necessary to get the chicken to start hitting, usually vigorously, at the ball. As soon as the bird strikes the ball with its beak, we say YES. Soon the bird is hitting the ball regularly, without our wiggling the ball or putting grain on it.

These are the main behaviors for which we give aptitude tests. Once the birds have passed their tests, we assign them to different "classes" to start learning their lessons.

The Dancing Bantam

In the finished form of this show, the chicken comes out of its "dressing room" at one side of the stage, walks across the stage, pulls a loop on a miniature juke box to start the music. The chicken then steps up onto a slightly raised circular platform and starts to "dance." The bird scratches around on the platform for several seconds until the feeder fires (back in the dressing room), and the chicken returns to its room.

As you can guess from the title of the act, we generally use barnyard bantams for this little show. Because they are rather small and active, the barnyard bantams furnish us with some of our best dancers. The larger breeds tend to be a bit more sluggish.

Once we have selected a candidate for the dance act, we first place the chicken very gently on a round, plastic platform, next to a miniature jukebox, and very near the feeder. We fire the feeder several times. Often the chicken will turn immediately and start to eat. If not, we repeat until the chicken starts to eat as soon as it hears

the "clunk" of the feeder.

After the chicken has become used to eating in this new situation, we wait for the bird's natural inclination to scratch. Often the chicken will very soon start to scratch. If it does, we say YES immediately with the feeder, at the first sign of a scratch pattern. If the bird is slow to start scratching in this new environment, we may put a few pieces of straw, even a few pieces of grain buried under straw, to encourage the bird. If the chicken now scratches with this "prompting," we gradually reduce the amount of straw until the bird is scratching on the bare platform.

Next we train the chicken to start the music for the dance. (Remember our reverse order of training -- last step first?) The miniature juke box close to the dance platform can be turned on if the chicken pulls a plastic loop mounted near the top of the box. During the basic dance or scratch training, this loop has been concealed. It is now made available to the chicken. In the feeder conditioning experience, the bird has learned to pull a plastic loop, and so, the chicken may quickly go to the now visible loop and pull on it. If not, we go back to the "teaser" steps described in training the loop pull, such as taping grain on the loop, using a pushbutton to operate the feeder, and so on. We reward any tug or even touching the loop. As the bird's pulls get stronger, we let the automatic system take over. When the chicken tugs hard enough to start the jukebox music, it automatically fires the feeder. When the loop-pulling response is strong, we drop out the food reward for this response and start putting the chain of behavior together. Now the bird must pull the loop to start the music, move to the dance platform, scratch on the platform, and eat from the electric feeder.

The next step is to start moving the electric feeder away from the platform toward the "dressing room" and finally into the dressing room. The feeder is moved a few inches at a time until after a few training sessions the bird has learned to walk from the platform, after the YES sig-

nal, into the dressing room and to the cup mounted there.

We now ask the chicken to dance for a longer and longer time on the platform. What we ask is for the chicken simply to stand close to a certain place on the platform for a certain number of seconds. The time the bird stands there and shades a photocell determines when the electric feeder will fire. But why does the chicken dance? Really it doesn't have to dance; all it has to do is break the photocell beam by standing in a certain area. The chicken's dancing has been rewarded, and soon the chicken believes it must scratch to be rewarded. The chicken has formed what is called a SUPERSTITION.

Many people have asked us about this dancing behavior and have wondered whether or not we shock the chicken to make it dance around like this. In the Middle Ages, dancing bears were trained in this way using a hot griddle, and of course they moved their feet around in a very fast shuffle to try to escape the painful situation. Now you know, the answer is plainly NO. We do not use ANY painful stimuli in training our animals.