# The Indiana University Axolotl Colony--1988

#### Susan Duhon

The colony is in the midst of the 1988 breeding season, and, again this year, we are having good success obtaining fertile spawns. Since January 1 we have had a success rate of nearly 41 spawns for every 100 pairings (ranging from about 35/100 in January to about 56/100 during the first three weeks of March). All of these spawns were obtained from natural matings without the use of hormones. This spawning success is coupled with our lowest mortality rate among adult axolotls in the four years I have been associated with the colony.

## Gene Availability

All pigment genes are available including normals (no lethal genes expected to segregate, any pigment genes could segregate), wildtype [no lethal genes expected to segregate; all dark  $(\underline{D/-})$ ;  $\underline{d/d}$ ,  $\underline{m/m}$ ,  $\underline{a/a}$ , and  $\underline{ax/ax}$  will not segregate], whites  $(\underline{d/d})$ , albino  $(\underline{a/a})$ , melanoid  $(\underline{m/m})$ , and axanthic  $(\underline{ax/ax})$ . Axanthic animals, however, are difficult to breed and may require a wait. We are having good success obtaining eyeless spawns, and cardiac spawns are increasingly possible as we continue to identify carriers. Other genes for which we have identified carriers include  $\underline{s}$ ,  $\underline{mi}$ , and  $\underline{pi}$ .

### Larvae Population Explosion

We again have a large supply of extra, normal larvae, an abundance which will probably continue until summer. Please call us (812-335-8260) or use E-mail (Duhon@IUBACS.BITNET) if you wish to have some of these.

#### Metamorphosis

You will notice as you read on in this newsletter that we have nearly entirely ceased feeding liver to axolotls in our colony in favor of soft-moist salmon pellets, which are cheaper, easier to feed, and nutritionally more balanced than a diet based on liver. We have noticed one "side effect," however, of the pellet diet. Namely, we have a somewhat higher percentage of spontaneously metamorphosing animals.

Perhaps thyroxine is one component of the fish meal used in manufacturing the pellets. Although the rate of metamorphosis is still low enough that it does not constitute a significant disadvantage to the new food for us, it does mean that we have a steady, small supply—for the time being—of metamorphosed animals that we do not want to maintain in the colony. At this writing we have three. Anyone who may be interested in obtaining some of these animals should contact us.

## Exports

Our international readers may be interested to know that over the past few years we have successfully exported axolotls, most recently to Switzerland, the Netherlands, and Japan. Since axolotls are an endangered species, a CITES permit is required, which takes up to a month to obtain. International shipments go by air freight. A shipment to Europe typically costs around \$100, one to Asia around \$200.

#### Electronic Mail

You can now communicate with the Axolotl Colony via computer. We are on the BITNET network, and our address is DUHON@IUBACS. If the ability to communicate this way instead of by telephone is useful to you, let us know. I will be checking for new electronic mail at least several times a week. Send us your electronic mail address, and we will use it in our contacts with you. If interest is high, we will expand our capabilities accordingly.

### Questionaire

As a final note, this newsletter includes a questionaire. We would like information from present users or potential users on ways in which the colony is or can be useful to you, and we would like to know the extent and variety of research or instructional uses to which axolotls are being put. Please fill the questionaire out and return it to us. Thank you for your support, and we hope to hear from you.