

AN AXOLOTL IDENTITY CRISIS

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Within the next year, we at the I.U. Axolotl Colony intend to change from keeping our approximately 450 adult axolotls in individual bowls to housing the animals in tubs of three to five animals each. With the communal tub system, we hope to lower costs, reduce the stresses on animals caused by frequent handling, and avoid potential water quality problems.

As our readers are probably aware, the purpose of the colony is to supply researchers with material. This requires that we maintain certain genetic lines. We identify, insofar as possible, each animal's genotype and keep complete records. In our future communal tub system, we'll need to be able to identify animals individually.

Axolotls are notorious for foiling marking techniques which are widely used for other animals. Mouth tags, T-tags, chemical and freeze branding, toe clipping, and collars all fail or are impractical on our large scale. (Malacinski reports that an axolotl will drop an entire tail to shed a T-tag.)

Of the methods tested so far, tattooing has proven to be the most durable, legible, and least stress producing. Tattoos remain legible after at least 6 months and don't show signs of fading. Tattooed animals have given spermatophores or spawned just a few days after the procedure. Also, this method allows us to retain the same numbering system we have always used, saving us from having to devise and interpret a code.

The axolotls are anesthetized with benzocaine (see the article by Vanable in Axolotl Newsletter # 14) or MS-222, then a 5- or 6-digit ID number is tattooed on the side of the tail. (Of course, axolotls from rougher sections of the colony often already have tattoos.) The procedure takes 10-12 minutes. Animals recover faster and with less danger of drowning if the water in which they recover is aerated.

Because we will be tattooing approximately 400 animals initially, and 100-200 each year thereafter, we

purchased a commercial tattooing machine. The complete set-up costs \$300. For colonies with fewer axolotls to mark, simply dipping a needle in ink (india ink for whites or albinos and commercial white tattoo ink for darks) and making a pattern of dots in the skin will suffice.

Axolotl tattooing isn't particularly easy, and I am constantly refining my technique. If you'd like more information, call, write, or use E-mail (DUHON@IUBACS.BITNET) to contact me.