

CENTRAL VALLEY BIOLOGICALS  
CENTER FOR REPTILE AND AMPHIBIAN PROPAGATION  
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To Axolotl Newsletter Readers:

Dr. Malacinski has kindly provided this opportunity for us to acquaint you with our offerings of amphibian and reptilian research material.

Of particular concern to this readership is that we have recently begun an extensive program for raising pleurodeles and axolotls. One area of research, for example, where we hope to provide a healthy source is that of regeneration. As most know, raising axolotls with undamaged limbs is difficult due to cannibalism. Our system for caring for young individualizes their housekeeping economically so that we can provide healthy, undamaged stock. We are also attempting, in cooperation with Dr. Malacinski, Dr. Brothers at U.C. Berkeley, Warren Fox at UC Irvine, and Dr. DeLanney at The Institute for Medical Research, San Jose, CA, to establish genetic lines which will be of interest to investigators. We will consider working out cooperative programs with investigators whereby we can serve as a "bank" for their stock.

For the past eight years, we have been a major supplier of bullfrog, (*Rana catesbeiana*) for high level research. We pride ourselves in that we supply the freshest-caught frog available. In most cases we will catch the frog one night and ship it to the investigator by express mail the following morning. We never ship wild-caught frogs that have been held for over four days.

By collecting the frogs ourselves, we have access to data such as: Air and water temperature, exact location of capture, date and time, water pH, water samples, or any other field observations that you might find of interest.

We are developing several lines of anurans that we believe have scientific merit. Two of these are Pyxicephalus Adspersus, from Africa, and Ceratophrys Ornata, from South America (Argentina). Both species are of interest due to their rapid growth rate and large individual egg size. At temperatures of 30 C, which the frogs prefer, a spawning hatches in 24-36 hours, begins metamorphosis in 14-21 days and can reach sexual maturity in as little as 6 months. The Pyxicephalus can grow to over 2 kilograms while the Ceratophrys will average 300-500 grams. Spawnings number for 1500-4000 in Pyxicephalus and 700-2000 in Ceratophrys. The larva of Pyxicephalus are herbivorous while those of the Ceratophrys are carnivorous. Preliminary studies by Dr. DeLanney, which he and I are presently testing in larger numbers, are that Taylor and Kollros limb stage VIII amputation shows regeneration in Ceratophrys but is absent in Pyxicephalus.

In the case of the Eublepharus macularius (leopard gecko) our breeding program has been so successful that professional collectors and importers no longer find it profitable to compete. More important for the intent of this communication, is that for studies involving reptilian development, we can provide dated eggs of either sex, by temperature manipulation. We can also provide healthy animals of any size for studies on autotomized tail regeneration.

If our facility offers resources that may assist you in your research, we stand ready to make individual arrangements that perhaps will permit us to offer some of our resources at no cost to you, other than shipping and handling, with the understanding that at the end of preliminary investigations, we would begin billing for any new stocks.

We are aware of the problems related to funding of new projects; to the concern about exploring other than the "tried and true", and we hope that our offer will provide an investigator time for the preparation of research grant requests in a realistic way.

My interest, fortunately supported by my present business, is to expand my usefulness to investigators. I have already been fortunate to have collaborated in several projects published jointly with Dr. Paul Licht at UC Berkeley. If this letter, for which opportunity I thank Dr. Malacinski, presents matters of interest to you, I can be reached as follows: Mail--8166 E. Shaw Ave., Clovis, CA 93612; Telephone--(209)298-6423.

Sincerely,

Bob Barnes

Ron Tremper