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## Blood Studies on *Amblystoma tigrinum melanosticum*

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Blood Studies on *Amblystoma tigrinum melanosticum*

Paul G. Roofe

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Project Number 92

Adult and larvae *Amblystoma tigrinum melanosticum* were collected from three separate ponds--Colter Bay, Gros Ventre and Pacific Creek areas. The blood studies consisted in obtaining the hematocrit, hemoglobin, differential and red and white blood cell counts on animals distributed as follows:

Colter Bay	Gros Ventre	Pacific Creek
Adults 16	Adults 12	Adults 12
Larvae 150	Larvae 80	Larvae 160

Movies were made on as many specimens of adults as possible, both in the aquarium and in the natural state.

Weights and lengths were obtained on all specimens operated upon. The following measurements were obtained in the laboratory: jaw width, jaw length, width between the eyes, length of fore and hind limbs, width of the mid-belly region as well as the width of pelvic and pectoral girdles.

Weights of the following organs have been done on animals obtained in the summer of 1958:

Liver-	Mesonephros
gall bladder	Lungs
Pancreas	Skin
Stomach	Brain
Small intestine	Heart
Large intestine	Spleen
Gonads	Eyes
Cloaca	Esophagus

All animals used in the work for 1959, have been saved for similar organ weights studies.

The movies are being analyzed for careful studies of the correlated movements of limbs with the body in an attempt to substantiate a thesis that the nervous system is so constituted that normally the limbs have a specific way of acting with the body in a free "swimming" state.

There is slight evidence that animals from the Gros Ventre pond tend to have more red cells, hemoglobin and a higher hematocrit than the other two. This, as yet, has not been statistically tested.