

## **Project Update: December 2007**

The study over the last 12 months fell into 3 main areas, these were;

- 1/ Provide site specific age and sex spatial information
- 2/ Determine habitat and dietary requirements of various life stages
- 3/ Assess the effect of the annual flood and drought on caiman distribution and population health.

So far 118 caiman have been ID-tagged, weighed and blood sampled. Results have shown that as the Pantanal dries out and the ponds disappear the caiman feed very little and draw on fat reserves laid down during the wet season when food was plentiful. Most caiman that remain within the permanent ponds throughout the dry survive on reserves until flood begins, bringing plentiful food. However, subordinate males are pushed out of permanent ponds by more dominant individuals and were found in a state of starvation. These animals may not survive through until the next rains.

We are now undertaking radio tracking studies, and using GPS data loggers to monitor the movements of the caiman and assess how far the animals will travel to and from rivers during the wet season.

One of the main focuses of the study was to determine the level of pesticide and heavy metal in blood and tissue from caiman inhabiting various rivers throughout the Pantanal. I have a number of blood samples taken from caiman and the overall health of these animals has been assessed. However, I have been unable to get the samples analysed for levels of pesticides and heavy metals within Brazil. I would like to make an appeal to any environmental chemist working in Brazil who would like to collaborate or be involved in this study to contact me.



Left: Tagging a Caiman. Right: Looking for Caiman