

## **Project Update: October 2011**

In order to be able to assess both baseline contaminations of crocodiles as well as mother to young transfer, it is required that we optimise our sampling procedure and only collect samples from adult female crocodiles. It is our hope to then also collect egg samples from these females, if and when they lay eggs. Our team have managed to design a sight-based identification method for crocodiles using underwater photography of their natural tail markings. This method will allow us to identify specific females on nest sites using remote camera traps. To date we have successfully assigned individual ID numbers to 11 adult crocodiles using natural tail markings. For each of these animals we have accurate location data, size and known basking sites. It is our hope that most of these adults are females and if they are photographed at nesting sites, it would be possible to collect both egg samples and tissue samples from the female (once the nesting process is over).

A pilot study for the use of acoustic tags on crocodiles was also carried out on three crocodiles of different size classes. As a tracking technology these tags were very effective as they provided long battery life, were light weight and cost effective. Manual tracking required long hours in the field but acoustic pings could be heard from as far as 400 m with the hydrophone. Unfortunately, the wetland environment limits the amount of access that we have by boat and two of the three crocodiles moved into the floodplains during the season and could not be followed.



