Ingula Update



Crane ringing at Ingula



It's not often that one gets to dangle from a 40m crane cable over a sheer cliff. This was the case on Tuesday, 17 November 2009, a memorable day for the Southern Bald Ibis colony at Ingula and a host of people involved in 'ringing' two young birds that were about to leave the nest.

BirdLife South Africa's national Bald Ibis programme is run by Kate Henderson, based in Harrismith, and funded by the Ingula Partnership. An important part of the programme is to understand the dynamics of the ibis population. Data for this is collected through sightings and, more specifically, by means of colour ringing.

A bright yellow, uniquely-numbered ring is placed around a fledgling's leg. The number can be read through binoculars and allows accurate tracking of the bird's movements.

330 birds were colour-ringed in the 1990's and Kate has ringed 40 in the period between 2007 and 2009. These two were the first to be ringed at Ingula and their numbers are IU and IV. Please look out for these two youngsters, and let Claudia Bennie (0721481099) know if you spot them.

Kate would normally set a ringbolt at the top of the cliff and belay over the edge to do the ringing. Thanks to a marvellous example of cooperation, Ingula was to be a very much more luxurious experience. Claudia Bennie, Hardus Muller, Mark Gentle and Chris Jansen managed to arrange a monster, I 00-ton crane, complete with 'basket'. Kate and Dr Res Altwegg from the South African National Biodiversity Institute (SANBI) were suspended alongside the two fledglings and managed the ringing process with ease. As Kate said afterwards, it was the easiest and safest ringing exercise she had ever undertaken.

Through Kate's work, we are learning more and more about the Southern Bald Ibis and so will be able to implement more informed and effective conservation management actions to improve the status of this threatened bird. Ingula plays a vital role in this work and it was heartening to see the willing assistance and interest shown in this project by the Bramhoek Dams JointVenture.

November 2009 Tel. 036-3423122

Progress on key projects Underground works

Fresh air inlet shaft: 84% of the rock support and primary shotcrete complete.

Switch yard: Work has started and is progressing well.

Main drainage access tunnel: 170.5m excavated.

High pressure penstocks: Excavation has commenced on penstock 1, 2, 3 and 4.

Transformer hall central heading: 42.6% progress.

Machine hall crown excavation: 93.5% complete, installation of cable anchors in progress.

Surge chamber access tunnel: 742m excavated to date.

Outlet channel base slab: 14 293m³ concrete poured.

Lower reservoir: Bramhoek



Overall progress is 63% complete. A final lift remains for the intake and outlet tower. Pre-cast gallery roof slabs have been placed and covered with RCC on both right and left bank. 204 027m³ of soft and hard material has been excavated and 18 546m³ concrete has been placed. The placing of RCC is in progress on both flanks with 36 640 m³ placed. The expected date for impoundment is in April 2010 and completion in October 2010.

Contractor Feature: WBHO

Several large companies have been awarded contracts for the main components of the Ingula Pumped Storage Scheme, for example the two reservoirs, the underground works and the power station. Ingula Update will be featuring these big companies in a series of articles.

WBHO

WBHO

The construction of the Bedford Dam (top reservoir) and Bramhoek Dam (bottom reservoir) for Ingula, is the responsibility of the Braamhoek Dams Joint Venture. WBHO is one

of the partners in this joint venture. But who are they, where are they from and in what other projects are they involved?

A leading force in construction in southern Africa, WBHO Construction [Pty] Limited is also engaged in a programme of expansion into greater Africa as well as internationally.

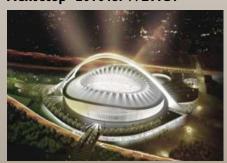
The origins of the present group date back to 1970 when Wilson-Holmes [Pty] Ltd was formed by John Wilson and Brian Holmes. A number of mergers followed resulting in the name being changed to Wilson Bayly Holmes [Pty] Limited in 1983 and finally to WBHO Construction in 1994.

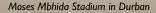
The driving force behind WBHO is a core of dedicated, hands-on management professionals whose experience spans decades of major construction projects in southern Africa, the Middle East and various Indian Ocean islands.

WBHO's offices are strategically located in Johannesburg, Cape Town, Durban, Port Elizabeth and East London. Construction activities, which cover the full spectrum, are divided into three main operating divisions - building construction, civil engineering and roads and earthworks. They have an Australian subsidiary, Probuild Constructions, with its headquarters in Melbourne.

WBHO is involved in several major projects that will benefit SA in 2010 and beyond. These projects include upgrading of the N1 highway in Gauteng and construction of the King Shaka International Airport in Durban.

Next stop - 2010 for WBHO!







Green Point Stadium in Cape Town

WBHO is also involved in the construction of three of the five new stadia which are being built for the 2010 soccer world cup. The Greenpoint stadium in Cape Town is the largest with 68 000 seats and construction is being carried out in joint venture with Murray and Roberts.

In Durban the Moses Mabhida stadium is being constructed as a joint venture with Group Five and Pandev. This stadium will have a capacity of 70 000 of which 50 000 are permanent and 20 000 temporary seats. In Polokwane, the 45 000 seater Peter Mokaba stadium is being built with a local partner, Paul's Building.

An award winning company

The group's motto is "Rely on our ability" and they strive to be the best construction company in southern Africa. They have received awards consistently for many years, including the Diamond Arrow Award for "Highest Rated Construction Company in SA" from 2001 to 2009. In 2008 they were placed 7th in the Sunday Times Top 100 Companies. The group has achieved several Fulton Awards for outstanding use of concrete.

With such a track record Ingula's Bedford and Bramhoek Dams are definitely in capable hands.

Progress on key projects

Upper reservoir: Bedford



The construction of Bedford Dam is well underway. Completion is scheduled for 10 May 2011. All excavation work on the embankment footprint is complete.

Dam wall outlet works

Concrete work for the intake tower in the dam wall is in progress and 14 of the 21 concrete lifts have been completed. The conduit and bifurcation has been completed. The gabions for the stilling pond are in progress.

Embankment construction

Construction of the plinth has reached the 85% mark (72 of the 85 plinth blocks completed). The rockfill placement is in progress and 317 000 cubic metres of rockfill (36%) has already been placed. The left bank retaining wall is 70% complete and six lifts of the mass concrete underneath the right bank retaining wall is complete. Consolidation and curtain grouting on the plinth and underneath the clay core embankments are in progress.

Headrace/intake structure



Intake channel: 28% complete
Headrace low pressure tunnels: 12%
complete

Surge shaft 3/4: 12% complete Surge shaft: 1/2: 5% complete High pressure shafts: 3% complete

