

***MASHATU BILLBOARD
APRIL 2001***

April 2001 Edition

*The elephant moves slowly to protect its vast brain,
With which it hears subsonic sound,
And in which it carries the topology,
The resonance's and reverberations,
Of a continent.*

__ Heathcote Williams
(Survivors Song, Owens 1992)

Movement patterns of the Central Limpopo Valley elephants

The movements of elephants and related species such as mammoths must have been pondered upon since primitive man first began to hunt them. Ivory hunters such as William Bell (1923) returned to hunting grounds that had been productive in earlier safaris only to find that their quarry was no longer there. Today an understanding of the movements of elephants is important as wild areas have diminished and the survival of elephants has become dependent upon the establishment of relatively small conservation areas, which will have to be adequate for elephant conservation for many of hundreds of years in the future (Whyte, 1996).

Knowledge of elephant movements can answer a wide range of questions relevant to their general ecology and thereby to their long-term conservation and management. Within the Central Limpopo Valley the elephants' range extends over international boundaries. An understanding of these movements is important for the development of a conservation plan for the population as a whole, especially with the planned development of the Shashe/Limpopo Trans Frontier Conservation Area.

The range of the Central Limpopo Valley elephants seem to be in excess of 16 000 km², throughout which approximately 1 400 elephants range freely. The region can roughly be divided into those areas used all year round and areas used on a seasonal basis. The Northern Tuli Game Reserve seems to form the core of the Tuli elephant population and a resident group of approximately 600 elephants use this area all year round.



To ensure that they get the choicest food items available and adequate water, elephants move long distances. These movements become obvious as the seasons change. During the dry season elephants are largely found where water is available, in river valleys and near swamps. When the rains come and water is found everywhere, it is no longer necessary for them to be confined to such places, and they spread out over a larger area. The distance and area that elephants cover vary from one region to another, depending on rainfall and vegetation types.

The Central Limpopo Valley is prone to droughts and with an average rainfall of 350 mm per annum elephants, during the dry season move over large distances in search of adequate food and water. During this season the elephants seem to concentrate in the riverine vegetation of the major rivers cutting through the reserve and some even move out of the reserve into the communal agricultural lands surrounding the reserve. Known seasonal movements occur to the east and west of the reserve. It also appears as if elephants started recolonising areas of their former range in the early 1990's, moving into Zimbabwe across the Shashe River and lower down the Tuli Block in Botswana and establishing small resident populations in both these areas. Movement of elephants into the communal lands and irrigation schemes during the harvesting months cause severe problems for both sides as a herd can be responsible for the complete destruction of a year's harvest in just a few hours.

There is no convincing evidence from anywhere in Africa of territorial behaviour in elephants, although both bulls and family units do have fairly distinct home ranges. There is a surprising lack of good data on the size of these home ranges, but what little information has been published indicates that an elephant's range varies tremendously in different habitat types (Hanks 1972). Factors like the availability of essential resources (food quantity, quality and the availability of water), restrictions imposed by the size of the conservation area and the degree of disturbance, example human induced, are the most important factors determining when, where and how far elephants move.



Looking at the movement patterns of the individual family units within the reserve interesting but confusing patterns are observed. "Charge's" group seem to range along the Matabole River and can frequently be found moving up and down this

river. At certain times, however, family units will join up and movement patterns will alter. “Charge’s” family is no different. They will join up with several other family units and a herd of up to three hundred animals can be seen. July/August is one of these periods where the movement patterns seem to change dramatically. Several of the families will join up and a big exodus to the Shashe River occurs. The elephants will stay in this area for up to 3 months when once again they will break up into smaller groups and move back into the central part of the reserve.

Movements within the reserve seem to be mainly influenced by the rivers cutting their way through the reserve to join up with the Limpopo River. The Majale River flows from the top western end to the lower eastern end of the reserve. Most of the other rivers flow into the Majale River before the Majale flows into the Limpopo River. The highest density of elephants is found along this river and, of course, the Limpopo River.

Daily movements seem to be temperature related with groups moving into the thick riverine vegetation in the early mornings to escape the heat of the day, which in summer can reach 40°C. By late afternoon and for most of the night herds will be seen moving in Mopane thickets and open plains areas.



One of the families that might greet you as you cross the Limpopo River on the cable car at the Pontdrift Border Post is “Floppy Ears”. She can be easily identified. In addition to her visible age and large tusks she also has one very unique permanently folded ear. “Floppy Ears” is the matriarch of a family comprising approximately 30 individuals of all ages.

Her home range seem to be the area from the Majale - Limpopo confluence close to Nel’s waterhole, past Pete’s Pond all the way down the Limpopo River. On rare occasions, however, I have found her higher up on the Majale but not once in the companionship of another group.

Keep a look out for her on your next visit to the reserve.

Did you know?

Elephants can go several days without drinking; during which they range up to 80 km from water, but by choice will drink and bathe daily.

An interesting story: In 1973 a herd of 37 elephants accidentally entered a small paddock in the Galana Ranch in Kenya where there was no water. Thirty of these elephants broke out on the

fourteenth day, without having drunk any water at all. Of the remaining elephants, two escaped, and two juveniles died. This incident revealed the amazing capacity of such a large mammal to endure without water (Sukumar, 1997 In: The illustrated encyclopaedia of Elephants).

Many thanks to all of the sponsors of this project:

Mashatu Game Reserve (Accommodation, food, vehicle, fuel and logistical support)

NOTUGRE (Financial support)

Pittsburgh Zoo (Financial support)

Peace Park Foundation (Financial support)

Disney Corporation (Financial support)

Rhino, Elephant and Wildlife Foundation (Equipment)

Several Landowners within the study area (John Dewar, Chris Burlock, Marcel Burgauer, Geoff Norris, Digby Bristow) – Equipment and financial support.

The Mashatu Archaeological Research Program

In the first edition of the Mashatu Newsletter, our readers were given a general introduction to the wealth of archaeological sites and the research program that is being conducted in Mashatu by Grant Hall. In the last few months, after everyone had recovered from the festive season, some progress was made with regard to the start of excavations at the site of Mmamagwa. After an intense battle with almost every mopane fly in Mashatu and a disagreement with a water container-stealing hyena, Grant has managed to lay out a 10 meter by 8-meter grid over a carefully selected section of the site.



The key task of an archaeologist is the location and recording of sites and the associated features. In the case of Mmamagwa, the location of the site was extremely easy. It is not all that hard to miss a site of nearly 40 hectares, with numerous large sections of stonewalling!!! Actually, the site has been known for a very long time and in fact, the last inhabitants of the area only moved away sometime in the 1940's. There is also mention of the site in a number of journals of the first British Pioneers, and in documents from the 2nd Anglo-Boer War (Note: More on the Boer War in the next edition). Finally in the late 1970's, some archaeological research was carried out at the site by a team of local and overseas archaeologists. Of more importance to the research being conducted at Mmamagwa is the identification of specific features on site, such as hut remains, grain bin foundations, middens and cattle kraals/pens. The location of such archaeological features allows one to begin forming a series of maps of the area, showing how the various inhabitants of Mmamagwa made use of the site and how this use may have changed over time. It is also important to consider other natural features, such as sources of clay, fresh water and arable land, when putting a land and resource map together. These natural resources would have also been of key importance to the people living in the area. An examination of the wider landscape surrounding the village or settlement is important, rather than just focusing on the settlement, as people would have made use of resources beyond the boundaries of the settlement. Through the identification of a variety of natural resources it is then possible to track how different groups made use of their surroundings and track any changes in land use over time.

This is the case at Mmamagwa, where a number of different Iron Age cultures were present over a period of about 1200 years.

Of importance to any archaeological research program, is the examination of any previous work that has been carried out on the site in question. There has been an initial study carried out on the site of Mmamagwa and another closely related site, Leeukop, by a group of researchers, led by Prof. Morgan Tamplin of Trent University, Ontario. The work conducted by Tamplin and his team, involved the full-scale excavation of the site of Leeukop and the initial mapping and surveying of Mmamagwa. A few small test pits were opened at Mmamagwa and some material was collected, including a number of whole pots and about twenty kilograms of faunal material. One radiocarbon date of 940 AD was obtained from the bottom of one of the test pits. Unfortunately at this stage of the current research project, it has not been that easy to locate all of the information produced from Tamplin's work, but further efforts are planned to locate as much of the information as possible.

Given the size of Mmamagwa, about 40 hectares, it is obviously not practical to excavate the entire site. Care must therefore be taken in selecting suitable locations to excavate. A walking survey is one of the best methods for identifying such areas. Grant has spent many hours walking the area and has managed to form a good working plan of the area, even though the local baboon troops and rock hyraxes have given him much verbal abuse, particularly when exploring the area around the fresh water spring. In fact the local wildlife has assisted him in locating areas of interest, by their dust bathing and burrowing activities. At Mmamagwa, one can find numerous archaeological artifacts on the surface, such as pottery, bone and trade beads. This material can provide one with an indication of what may lie below the surface. Subtle changes in the in the colour of the soil and certain plant species can also provide some clues to a number of features. Cattle kraals are indicated by soils that are grayish in colour, while soils around homesteads tend to be more reddish in colour. An archaeologist must, however, take care, particularly in the case of Iron Age sites, not to be seduced in to thinking that a large amount of surface material is indicative of a favorable location to excavate. Although copious amounts of archaeological material may indicate a rich deposit, the actual deposit may be very disturbed and thus not all that suitable to dig. The reason, may be due to the intensive burrowing activities of rodents, such as Springhares, which result in artifacts being brought up on to the surface. The burrows run up and down through the stratigraphy and do a very good job of mixing old and new layers, creating a nightmare stratigraphy that is extremely difficult to interpret correctly. This is

certainly the case in certain parts of Mmamagwa. Two of the largest middens on the valley floor have very rich deposits as indicated by the vast amount of pottery and bone on the surface. These artifacts represent a number of different Iron Age groups that have all been jumbled together. Unfortunately both have been already well excavated by Springhares and other animals, which will have seriously mixed up the stratigraphy. So, as tempting as these areas may be to excavate, it was decided to concentrate efforts on other parts of the site. An excavation is still planned for the midden area, but it will be done on the edges of the middens, where there has been almost no burrowing activity.

In addition to all the animal activity on site, there has also been a fair amount of water erosion at Mmamagwa. A number of small gullies and a substantial streambed have developed along the downward gradient of the valley floor. Although they have caused some damage to the site, the sides of these gullies and the stream banks also provide a glimpse of the stratigraphy of the valley floor, particularly where they have cut across areas of human activity. By carefully examining these exposed areas, it can be possible to find suitable locations for excavation, as the water has already done some of the hard work of removing the soil. As mentioned in the previous newsletter, the heavy rains of 2000 resulted in the stream at Mmamagwa flowing quite strongly for a short period of time. This water action has cut away at a number of spots along the curves of the stream, revealing a number of very interesting features. There are at least two or three areas along the stream, where it is possible to see the remains of some hut floors, cattle kraal deposits and clusters of bone and pottery. Although regrettably, some archaeological material has been lost through this erosion, the majority of the deposit appears to still be intact and more importantly, one is able to see that the stratigraphy has not been disturbed by extensive burrowing. One particularly impressive section, of about 12 meters in length, has been selected for the first series of excavation. This area is now referred to as the Mmamagwa Split Rock site or MSR site.

The first task, once having decided on a suitable area for excavation, is to lay out a grid system over the site. A grid system is important as it allows the archaeologists to accurately map every artifact and layer present and relate them with each other, as each item has its own specific location known. As the area chosen at Mmamagwa covers a fairly large area, an 8 by 10 meter grid has been laid out. This grid has been then divided into a series of 2 by 2 meter squares, each with a specific identification number, for example D3 or A6. Using such a system allows the

easy identification and precise location of all the artifacts and features. This makes the drawing up of stratigraphic sections and sites maps an easier task.

The MSR site has a number of interesting features. The site is located on the side of the stream and covers about 500 square meters. The stream bank is about 2.5 meters high at this point, but the archaeological deposit appears to be only about 75 to 100 centimeters thick on the exposed area. The deposit may well be deeper further away from the stream, but only excavation will reveal this. There are a number of small middens further away from the stream, with a fair amount of surface material visible. There is some indication that rodents have done some burrowing on a couple of these middens. There is also a very large sandstone boulder on the site. This is about 5 or 6 meters in height and provides a natural windbreak and a welcome source of shade. On the northern side of the boulder, on a flat section of exposed bedrock, is an area that appears to have been used for the manufacture of beads. These beads were made of ostrich eggshell (OES) and also the shells of the Giant African Landsnail (*Achatina sp.*). A more detailed explanation of bead manufacturing will follow shortly. The immediate evidence for the use of this area for bead making can be found in the form of a number of smooth grooves on flat sandstone slabs. These narrow grooves have formed due the people making the beads rolling strings of rough beads on the sandstone in order to make them smooth.



The section exposed on the stream bank provides a neat, clear picture of how the archaeological deposit has developed over time. One can clearly see a thick layer of pale gray material, sandwiched between two darker gray layers. This pale gray layer is made up from ancient cattle dung that built up when the area was used as a cattle kraal. There are numerous pieces of pottery and a lot of fragmented bone mixed in with the dung. The two darker layers are made up of charcoal and ash, as well as some pottery and bone. A number of charcoal samples will be collected from these two layers and sent for radiocarbon dating. The dates obtained from each of the ash layers will provide a bracketing date for the formation of the cattle kraal.



About four or five meters away from the cattle kraal layers are the remains of a hut floor. This can be seen as a series of pale yellowish bands. These yellow bands are in fact the remains

of the hut floor, which was made from clay . The reason that this particular hut floor has survived the tests of time, is that this hut burnt down at some stage. The heat of the fire baked the floor hard and thus made it more resistant to erosion. The evidence for the burning of the hut can be seen on either side of the clay layers, in the form of two patches of ash and charcoal. These are the remains of two of the wooden support poles used in the manufacture of the hut. Once again it is planned to take some charcoal samples from these two ash lenses for radiocarbon dating in order to obtain a date for the hut. The dates for both the hut and the cattle kraal should be almost identical. Close to the hut floor, about 7 centimeters below the surface is a large piece of pottery that is slowly eroding out of the deposit and just next to it are the remains of a small copper bangle.



Having set up the grid over the site, the next step will be to accurately draw the full section to scale. The area in question is about 10 meters in length. The attached section drawing is not a detailed one, nor is it to scale, but it has been provide to give one an idea of what will be produced in the future. It will also help with interpreting the actual photographs of the deposit. Once the section drawing has been made and a detailed selection of photographs taken, the actual process of excavation will begin. Grant will be working from within the streambed, excavating back from the edge. Due to the height of the stream bank and Grant's lack of height, he will build up a series of steps using large heavy-duty fertilizer bags filled with river sand. The plan is to expose the kraal and hut floor and to locate any other associated features and then map their positions in association with each other, as well as a detailed analysis of all the artifacts recovered.

The Magic of Beads



When on tour to Mmamagwa, some of the most regularly found artifacts are the various types of beads. Although pottery fragments and bones are points of interest with guests, the beads always form a highlight and a fascination. Often groups visiting Mmamagwa will suddenly find themselves hunched over, peering intently at the ground in the hopes of finding a bead or two. This can sometimes be a problem as everyone becomes so caught up in the treasure hunt that time starts running out and the sunset is over before they get to the top of Mmamagwa Hill. This can also develop into a competition between guests with everyone trying to find the most beads in an intense bout of what is now commonly referred to as “chicken-fever”. This malady, generally a short-term affliction, affects guests shortly after arriving at the site. The symptoms include an intense desire to spend lots of time scratching the ground and bobbing up and down, as one eagerly searches for an interesting item of two, not unlike chickens in a farmyard. It should be noted that the main source of the problem lies with Grant, who has a terminal case of “chicken-fever” and who will happily spend hours and hours scanning the sites for interesting artifacts.

People have held a fascination for beads and beadwork for thousands of years. They have formed an important part of the history of numerous African cultures and in fact still do to this day. To date the oldest recorded beads in the world, made from ostrich eggshell, have been found in Africa, at a site in Kenya. These beads were dated to between 37 000 and 39 000 years old. Beads should not be viewed as mere trinkets, they have a special language all of their own. They can on a basic level function as a form of currency, a symbol of wealth and status, but on a more spiritual level, beads can have special powers, be spiritual talismans and be used to deliver coded messages. There is no gender boundary governing the use of beads. Both men and women

will make use of beads for a number of reasons, such as adornment or as an indication of status. One of the best examples of bead use can be found in South Africa with the Zulu and Ndebele. Zulu sangomas or traditional healers use bead covered gourds and a variety of divination tools, and will wear beaded costumes and headgear. Beadwork is also used in courtship and marriage rituals. The complex use of patterns and colours are used to convey a variety of specific messages.

At Mmamagwa one can find two broad categories of beads, namely locally manufactured beads of ostrich eggshell and Achatina shell and a variety of exotic trade beads made from glass or ceramic. There are even beads made from small, whole white cowrie shells that have been brought in from the east coast of Africa. To date, almost 700 individual beads have been collected from the surface deposits of Mmamagwa. The majority of these are ostrich eggshell and Achatina beads. About 120 various glass and ceramic trade beads have been found. These range from minute turquoise coloured glass beads to fairly large cobalt blue angular beads. As the beads have all been found on the surface, it is difficult to provide an accurate date for any of them. Nevertheless these beads do cover a considerable period of time and some of them may be as much as 900 years old. The larger cobalt blue beads are of fairly recent origin, having been manufactured in Europe and brought to Africa by European travelers and colonists. The smaller glass and ceramic beads, ranging in colour from white, yellow, red, green, blue and turquoise are most likely of Middle Eastern, Indian or Far Eastern origin, having found their way to Mmamagwa through the great trade networks that existed between the Iron Age cultures of southern Africa and the Arabic traders of the Indian Ocean.

A number of particularly interesting beads, referred to as “Garden-roller” beads have been found at Mmamagwa. The majority of these beads are broken, but a few whole ones have been found. These beads date from the Mapungubwe Period (AD 1220 to AD 1290). These large turquoise coloured beads were actually manufactured at the site of Mapungubwe, about 40 kilometers to the east of Mmamagwa, near the confluence of the Shashi and Limpopo Rivers. They were made from the small turquoise coloured trade beads that were brought to Mapungubwe, before they were distributed to the various other settlements in payment for trade goods. Mapungubwe, at this stage was the controlling force, acting as a middleman for all the trade items moving to and from the east coast and thus regulating the distribution of all trade items in the Limpopo Valley. The smaller beads were obviously made available to the smaller settlements, as the small beads have been found at Mmamagwa, but as a control method to

regulate the movement of wealth, the rulers at Mapungubwe also ordered the manufacture of the “Garden-roller” beads. Skilled craftsmen at Mapungubwe melted down the small beads and recast them to form these larger beads. Each bead is unique, as they are all handmade. A clay mould was made for each bead and once the bead was cast, the mould was broken to release the bead. The beads were formed in a number of ways. The first method was to melt a batch of small beads in a crucible and then pour or force the molten glass into a mould. The second method was to fill a bead mould with the small beads and then to place the mould into a furnace so that the beads melted. It is possible, with the use of a magnifying lens, to tell the difference in manufacturing techniques. A bead made by the second technique may still have the shapes of the smaller beads visible. Mapungubwe is the only site where unfinished “Garden-roller” beads still in their clay moulds and the moulds themselves have been found. From this archaeological evidence it can be concluded that Mapungubwe was the only source of the “Garden-roller” beads.

The production of OES and Achatina beads is a slightly easier process, but is very time consuming. As previously mentioned, these types of beads have been made for a very long period of time in Africa, possibly for the last 39 000 years. Suitable ostrich eggshells and snail shells were selected and broken into small pieces, about 1 to 2 cm². Holes were then drilled through the center of each piece. Some beads were drilled from both sides, but the majority were drilled from one side only. The holes were most likely made using, at first, a thin hard piece of pointed wood or bone, which was spun or rolled by hand, or a small bow wrapped around the wood or bone. This would have been similar to the principle of using a fire bow. Fine grit may have also been used along with the drill bit, to form the hole. During the Iron Age the drill bit was most likely made from metal. Once the holes were drilled, the pieces were roughly rounded off, by either snapping small bits off, using a small stone and anvil or by biting off pieces with one’s teeth. The rough beads were then strung together on a cord of either sinew or plant fiber. These strings of rough beads were then rolled on flat pieces of sandstone or a similar gritty stone, in order to smooth off the rough edges and create some beautifully rounded. Cowrie shells were also modified before they were used. The backs of the shells were broken off and then the rough edges smoothed down to create a thin flat bead. These were then sown or glued on to a variety of items.

MASHATU BIRD NEWS:

BLACK EAGLE UPDATE: (*Aquila verreauxii*)

It appears the immature black eagle at the Mmamagwe ruins and mentioned in last months edition has left the safety of its parents and moved off to fend for itself. Immatures are dependent on their parents for up to 5 months after leaving the nest. This immature will be fully mature at 5 years of age. We wish it well and hope its parents are successful again this year in raising another chick.

MIGRANTS:



Storks and more storks:

It is summer and once again storks of all species are around in huge numbers.

This has been a great season for Yellowbilled storks. Hundreds have been seen flying overhead or gathering at waterholes along the Majale river.

Commonly seen storks:

White

Black

Abdim's

Woollynecked

Openbilled

Saddlebilled

Marabou

Yellowbilled

RARE AND UNUSUAL BIRD SIGHTINGS:

Woodland kingfisher:

I was standing under the shade of a large Mashatu tree on the 10/01/01. I caught a flash of blue out of the corner of my eye and noticed a Woodland kingfisher swooping down on what looked like a huge insect. It skimmed the ground catching its prey and flew up into a low overhanging

branch. What interested me was the squealing distress calls of the prey. I took a closer look and noticed a long tail and realised it had caught a small rodent. After a minute the prey was softened up by thumping it against the branch and then swallowed head first. I consulted various bird books and could find nothing on Woodland kingfisher feeding on rodents.

RANGERS MOST UNUSUAL BIRD SIGHTING:

JAN – MARCH 2001

Ranger Jou Mazebedi reports:

“I was transferring guests from the airfield and on returning we spotted a Martial eagle swooping down on a steenbok. The steenbok froze and the Martial eagle sunk its claws into it. There was a few second struggle before it was killed. It was then interesting to see how the Martial eagle battled many times to lift the steenbok into a nearby tree whilst a Blackbreasted snake eagle ‘dive bombed it’.

RANGERS BIG BIRDING DAY RESULTS:

Results of this quarterly big birding day were 147 species in a seven hour period. Well done rangers.

MAIN CAMP WATERHOLE FREQUENTS:

Nightjars:

During summer evenings the spot light shining over the Main Camp waterhole attracts insects in their masses. This in turn attracts a variety of nightjars making use of the feeding opportunities created by the spotlight. It is common to see up to 15 nightjars displaying aerial acrobatics and hawking insects on the wing. Common species are: European, Fierynecked, Rufous-cheeked, Mozambique, Freckled and occasionally Pennantwinged.

Kingfishers:

The waterhole at main camp is home to a variety of fish species. The most common being the Mocambique Tilapia. The feeding opportunities attract the following Kingfishers: Pied,

Malachite and Giant kingfishers. Woodland, Greyhooded, and Brownhooded kingfishers are also often seen preying on insects that are attracted to the water. With a light zoom lens these colourful birds can be shot easily from the terrace overlooking the waterhole.

GENERAL BIRDING NEWS:

TOTAL SPECIES COUNTS:

Checklists are filled out on a monthly basis at Tent Camp, Main Camp and Pete's Pond bird hide. Below are the total species count for the last 3 months.

AREA SPECIES COUNT:

AREA	SPECIES COUNT
Tent Camp:	70
Main camp:	116
Big birding day results	147
Pete's pond	68
Ranger reports	268
Total species count (Jan-March 2001):	268

NEW ADDITIONS TO MASHATU'S BIRD CHECKLIST:

Recently a guest from Gaborone sighted a Montague harrier and an African crane, which are 2 previously non recorded bird species at Mashatu. Thanks for this contribution to our bird list.

This brings the total confirmed species to 361 for Mashatu Game Reserve

MAMMAL NEWS

DOMINANT MALE LION:



It looks like our dominant male lion is still the ‘king of Mashatu.’ Recently a young male lion in full mane was seen briefly following the dominant male lion. There was no evidence of a battle for supremacy but the young male has not been seen again. So it looks like the Mashatu king lives on.

ELEPHANT AT THE MAIN CAMP WATERHOLE:



Due to a lack of rain this season all animals and especially elephant have been frequenting our Main Camp waterhole below the terrace. We keep our waterhole filled with fresh water. Water quality to an elephant is very important and it is interesting to see how an elephant utilises its water source.

They swim and mud wallow at one end of the waterhole and drink from the other. It is common for herds in excess of 50 elephant to visit the waterhole. This makes for exciting viewing and excellent close up photography.

RANGERS MOST UNUSUAL SIGHTINGS

Ranger Fish Maila reports:

“On a hot summer mornings drive we were stationary at a small water hole on the Majale River. We were observing a hyaena wading belly deep in the water. At first it looked like it was just cooling off all the while looking keenly into the water. Suddenly it plunged its entire head underwater and to our amazement surfaced with a fish (Mozambique tilapia) firmly in its jaws. One gulp and it was down. This is a first for ranger Fish who has been working in the area for 20 years.”

KEEPING YOU IN THE LOOP

RANGER PROFILE:



Name: Jou Mazebedi
Date of birth: 16/03/1962
Place of birth: Madiope
Occupation: Specialist Professional guide
Special interests: Birding and mountain biking

Jou has been a Professional guide at Mashatu for 12 years. He is also Mashatu's mountain biking ranger. Mountain biking safaris began in 1999 and Jou has an exciting story to share: *“Early one morning my guests and I were cycling through the central area of the reserve. In the distance we spotted a lioness with 2 cubs disappearing into the bush. We then noticed an old kudu cow lying on the ground. We cycled closer and found that the cow was still alive but struggling to breath. There were puncture holes on each side of the throat and claw marks on the rump. After a few minutes she stood up and stumbled off into the near by bush to face a certain death.”*

As a ranger at Mashatu, and in his own words, Jou has another of his favourite sightings he will never forget: *“We were out on an afternoon drive near Fraser Jones weir. It was hot and dry and the elephants had dug a small deep hole in the dry river bed in search of water. Two impala ewes were standing nervously near the hole wanting to drink, but didn't. A third impala approached from the river bank and walked directly to the hole to drink. As it lowered its head to drink a leopard jumped out of the hole, attacked the impala killing it quickly before dragging it up a nearby tree.”*

Mashatu Main Camp has a new Food and Beverage Manageress

Welcome to Christelle Bondesio!!



The bachelors Lloyd, Grant are very pleased with this new appointment. Another bird, but not of the feathered kind.

Christelle has a National Diploma in food service management and some of her responsibilities along with others include:

- The day to day management of the kitchen
- Controlling and ordering of stocks
- Planning menu's
- Preparation and presentation of food
- Guest liaison

We would like to take this opportunity of wishing Christelle all the best and are looking forward to tasting some of her delicious dishes.

Mike King

Main Camp Manager.

KEEPING YOU IN THE LOOP

DISCOVERY ROOM:



Rock scorpion:

Our latest addition to the Discovery room is a huge scary looking rock scorpion. As lethal as it may look its venom is mild and its sting slightly more painful than that of a bee sting.

There are 2 different families of scorpions:

- | | | |
|--------------|---|---|
| Buthidae | - | thin, small pincers and thick short tail |
| | - | potent and rarely fatal neuro-toxic venom |
| Scorpionidae | - | thick, large pincers and thin long tail |
| | - | mild non fatal venom |

“FRIENDS” AT THE BAR:



Our bar the “Gin Trap” overlooking the waterhole has made friends with a number of Foam nest frogs also known as Grey tree frogs. Each evening they can be seen perched patiently on picture frames, shelves and lamp shades whilst waiting for a meal of insects to arrive. These foam nest frogs, as the name suggests, build nets out of foam, strategically placed above

water sources during the rainy season. Once the tadpoles hatch from the eggs, within the safety of the foam nest, they wriggle free falling into the water below.

KEEPING YOU IN THE LOOP

LIMPOPO VALLEY HORSE SAFARIS



Welcome to Limpopo Valley Horse Safaris!! Steve Rufus, in collaboration with Mashatu Game Reserve, is now offering horse safaris. We would like to welcome Steve and his crew to Mashatu Game Reserve.

Whilst all Steve's guests were soundly asleep, safe within their tents, during one of the horse trails Steve had a different experience. In order to protect the horses from all kinds of things out in the bush thinking of horses as an easy meal, Steve needs to sleep out close by the horses. It was on one such an evening that a hyena decided to taste Steve's boot. Apparently the hyena did not like the taste or was it maybe the smell? Steve woke up from a tug on his boot and saw the hyena run off in the distance. (Maybe there is an advantage of having smelly hiking boots!!!).



Bush Craft



Dan Masupe started out at Mashatu Game Reserve as a barman in 1992. He worked for three years as a barman and then asked if he could become a ranger. After undergoing training, Dan was employed as a ranger in 1995. He enjoys being a ranger and believes it is a good future for him. His speciality is birding and he enjoys the challenge of identifying bird calls and the large variety of birds found on Mashatu.

MOPANE TREE (*Colophospermum Mopane*)

Description



It is a small to medium-sized tree, with an erect narrow crown, although it is sometimes found as an irregularly deciduous 1-2 m high shrub. The bark is dark grey or brown, rough, and longitudinally fissured. The leaves, which appear at the beginning of the rains, are alternate, with a single pair of characteristic large triangular leaflets, often termed "butterfly-shaped". Leaves are deciduous but sometimes remain on the tree into the dry season. During the heat of the day the leaflets can be found folded together, providing little shade. Young leaves are reddish-brown and glossy, later becoming matt green.

Mopane and elephants

Mopane leaves and young twigs are a well-known and valuable source of food for wildlife and



cattle in the dry season. The Mopane trees in the Northern Tuli Game Reserve form the bulk of the elephants diet. Elephants, more than any other large mammal, can cause marked changes to Mopane trees, sometimes reducing woodland to shrubland. In areas of high elephant concentration a marked impact on the trees can be seen.

One of the best-known products of the Mopane is the Mopane worm, the edible larva of the Saturnid moth (*Gonimbrasia belina*). Sometimes termed the Anomalous Emperor. The larva is much sought after in Botswana as a delicacy. There are normally two broods of the moths per year, one with the larva feeding from December to February, and the other feeding from April to May.

Mopane is not widely used for medicine, but a bark extract is reported to be used against syphilis and to treat inflamed eyes and also as a remedy for diarrhoea and dysentery. An infusion of the roots has been used in Zambia to cure temporary madness and in Mozambique to kill intestinal worms. In some parts of Namibia, gum extracted from heated wood is used to heal stubborn wounds. The bark is reported to be used in making twine or string in various countries.



Something Local



Annie is one of the chefs at the Main Camp. She has been with the company for 18 years and is responsible for keeping the staff and guests staying at Mashatu Main Camp fed with some of her delicious dishes. Her favourite dish is Chicken mushroom pie and for desert, chocolate ripple cheese cake (maybe we will be able to convince Annie to share these recipes with us, but this is going to take a lot of convincing!!)

Mopane Worms *a la Annie*

Ingredients

Water

1 tablespoon cooking oil

1-teaspoon salt

¼ cup milk

½ cup cream

Add cooking oil and salt to water. Heat until water reaches boiling point. Add the Mopane worms and cook until dry. Add the milk and cream. Stir over low heat until sauce is thick and creamy.

Serve hot as main course with pap (polenta).

Mopane worms can also be served as a dry snack.

How to dry Mopane worms:

Add salt and Mopane worms to water. Cook until dry. Spread the worms out in the sun and let dry. For added flavour the Mopane worms can be dried over medium to hot coals. Make a fire outside and let burn until some coals form. Spread the coals out and place the Mopane worms on the coals. The coals must not be too hot. Keep on the coals for no more than 5 minutes. Take off and let dry in the sun.

Serve cold as a snack at your next cocktail party.