

# FOSSILS IN ZIMBABWE

Issued 21<sup>st</sup> July, 1998

(Extracted from Philatelic Bureau Bulletin No 3 of 1998)<sup>2</sup>



*Massospondylus carnatus* fossil  
found in Zimbabwe

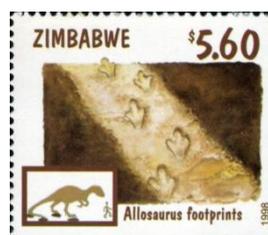
The word 'fossil' is derived from the Latin '*fossilis*' meaning "to dig" and '*fossus*' - "dug up" and describes the preserved part of a once-living animal or plant, or something that has been formed by the action of a once-living organism, (trace fossils). The majority of fossils are the hard parts of an animal or plant (e.g. bone, shell) while the trace fossils include footprints, burrows, trails, tooth marks, stomach contents and faeces, which are rarely preserved.

Zimbabwe has a well-preserved record of prehistoric life forms, both flora and fauna. Some of the most significant finds are depicted on this set of stamps.



## **\$1.20: Fossil Fish**

For over 400 million years fish have been among the world's dominant life forms and have evolved and adapted to changing conditions over a considerable period of time. The two fish depicted here would have lived during the Permian Period, (250 million years ago) and were found in Madumabisa mudstone at the confluence of the Busi and Sengwa rivers, in the Zambezi Valley. Fish have not been commonly found in Zimbabwe, consequently, little is known about them.



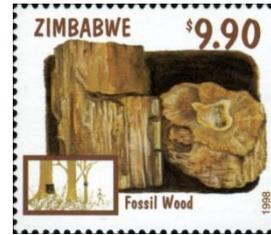
## **\$5.60: Allosaurus footprints**

*Allosaurus* was the most formidable of the Jurassic carnivores. 10 metres (35 ft) long and weighing 2 tons, this bipedal carnivore had ferocious claws on all four limbs for tearing at its prey and with its massive skull and jaws must have been the terror of the forests. It has been described as having the combined characteristics of a mountain lion, a crocodile and a shark! *Allosaurus* was the animal most likely to have made the footprints in the Ntunbe River bed in the Chewore Safari Area of northern Zimbabwe. The footprints are tridactyl (3 digits) and have an average length of 40cm. The average distance between the left and right foot is 1,7 metres and at a total length of 48 metres, the Chewore trackway is one of the longest and best preserved dinosaur trackways in Africa.



**\$7.40: Massospondylus**

*Massospondylus* was a fairly large, bipedal (two legged) dinosaur, 3 - 5 metres long, that existed during the Triassic Period (220 million years ago). It lived in an arid desert environment and was probably omnivorous. The small size of its skull relative to the body length, and the relatively weak dentition, suggest that it did not actively prey on large animals but was most likely an opportunist feeder. *Massospondylus* appears to have been the most common dinosaur in Zimbabwe. Remains have been found at Nyamandlovu, the Hurungwe District and on Sentinal Ranch near Beitbridge where there is an almost complete skeleton and from where the left foot depicted on this stamp was found.



**\$9.90: Fossil Wood**

The process of fossilization known as petrification (turning to rock) is particularly fascinating and occurs in two ways: holes formed in the bone or stem of the decayed organism are filled in by an inorganic compound or, the original mineral substance of the organism is replaced, molecule for molecule, by a different mineral substance carried in water solutions.

The most common petrifying minerals are calcite, silica and iron compounds. Due to the process of petrification, most of the minute structure of the organism may be preserved as in the case of petrified wood. Fossil wood is very common in Zimbabwe where there are areas of 'petrified forests' in the Hwange and Gokwe districts from where the two pieces depicted on this stamp were found.



The Bulletin cover shows the first and second caudal (tail) vertebrae from a *Vulcanodon karibaensis*. The remains of this dinosaur were discovered in 1969 on an island in Lake Kariba and has so far not been found anywhere else in Africa. (see left)

The First Day Cover depicts a section of partially excavated dinosaur skeleton found in the Nyamandlovu area of south western Zimbabwe. The remains are of *Syntarsus rhodesiensis*, a small carnivorous dinosaur which existed during the Triassic Period and was first discovered in Zimbabwe at Nyamandlovu in 1963. It belongs to a group of dinosaurs which had never before been found in Africa. Other remains have since been found at Mana Pools in northern Zimbabwe and in South Africa.

## Catalogue listings

<b>SG</b>	<b>ZSC<sup>1</sup></b>	<b>Value</b>	<b>Description</b>
970	398	\$1.20	Fossil Fish
971	399	\$5.60	Allosaurus Footprints
972	400	\$7.40	Massospondylus
973	401	\$9.90	Fossil Wood

## Technical details

<b>Stamp size:</b>	All values	35 x 30 mm		
<b>Sheet Size:</b>	50 stamps (10 rows of 5 stamps), two panes per printed sheet			
<b>Artist:</b>	Janet Duff			
<b>Paper:</b>	ZSC paper type F - Although still officially described as HS8, the paper properties changed in 1996. This is fluorescent front but non-fluorescent back and the gum is whitish PVA.			
<b>Print colours:</b>	Cyan, magenta, yellow & black			
<b>Perforations:</b>	SG 14½ x 14, ZSC 14¼ x 14 Top margin: Perforated through. Other margins: Imperforate			
<b>Printer:</b>	NatPrint, Harare, Zimbabwe			
<b>Printer's Imprint:</b>	Bottom Margin, below Row 10 Column 3. Imprint printed in black			
<b>Cylinder numbers:</b>	Top margin above R1/1. Colours from left – cyan, magenta, yellow, black			
<b>Colour register:</b>	Type TL 4– round boxed – left margin opposite R1/1. Colours reading down – cyan, magenta, yellow, black			
<b>Sheet Value:</b>	Bottom margin, above R1/5, printed in black.			
<b>Sheet Number:</b>	Type SN 4a with 'PTC' prefix, right margin opposite R1/5, reading down			
<b>Print numbers:</b>	\$1.20	2,500,000	\$5.60	190,000
	\$7.40	190,000	\$9.90	190,000
<b>Issue date:</b>	21 <sup>st</sup> July, 1998			
<b>Withdrawal from sale:</b>				
<b>Demonetarisaton:</b>				

## Listed varieties

No listed varieties have been noted

## Unlisted Varieties

There are numerous small dots and specks in the printing of these stamps, particularly in the backgrounds.



## First Day Cover

The cover numbering comes from the catalogue produced by Geoff Brakspear.

A pictorial first day of issue canceller was produced for this issued and was used by the Philatelic Bureau. Other first day cover cancellers continued to be used at main post offices.



ZW076.1 (PTC)



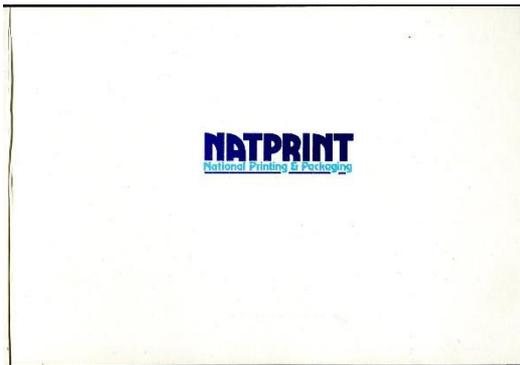
220 x 110 mm

## Related Material

### Natprint Proof Presentation Cards

Presentation cards produced by Natprint with imperforate proofs of the stamps to be issued. The presentation cards were forwarded to the PTC for approval of the final product.

*(Courtesy of Jefferson Ritson)*



Front cover



Inside front cover



\$1.20 stamp



\$5.60 stamp



\$7.40 stamp



\$9.90 stamp

**Bibliography:**

1. "The Zimbabwean Concise Postage Stamp Catalogue", published by Harare Stamp Company, edited by Ken Allanson, Mike Amos and Geoff Brakspear. The catalogue continues to be updated and expanded by Geoff Brakspear
2. PTC Philatelic Bureau Bulletin No 3 of 1998.