

35TH INTERNATIONAL GEOLOGICAL CONGRESS

27 AUGUST - 4 SEPTEMBER 2016 | CAPE TOWN, SOUTH AFRICA



POST 8:

The Pongola Supergroup Earth's Earliest Stable Continental Margin

Field Trip Leader: Allan Wilson



ITINERARY

The Mesoarchaeon Pongola Supergroup is an exceptionally well-preserved succession of volcanic and sedimentary rocks that extends for 270 km close to the eastern margin of the Kaapvaal Craton in South Africa and Swaziland. It represents a volcano-sedimentary continental or epicontinental deposit that is one of the most extensive coherent Archaean terrains in the world, and the oldest of this extent. Its characteristics are unique amongst supracrustal terrains of this age and are unlike those of other Archaean greenstone belts. Its unique nature is that it marks the transition in southern African crustal development from preceding early greenstone belts, such as observed in the Barberton and Nondweni greenstone belts, to late Archaean basin formation on stable continental crust.

Field Trip Leader: Allan Wilson

Start: Durban

End: Johannesburg

Dates: 7 days, Saturday 3rd to Friday 9th September 2016

| DATE | ROUTING |
|----------------------|---------------------|
| 3 – 4 September 2016 | Fugitives Drift |
| 4 - 6 September 2016 | Melmoth |
| 6 - 7 September 2016 | Ithala Game Reserve |
| 7 - 9 September 2016 | Paulpietersberg |
| 8 - 9 September 2016 | Piet Retief |

Meal Key

BB Bed and Breakfast
FB Dinner, bed and breakfast

| | |
|-------------------------|--|
| DAY | 1 |
| | Sat 3 Sept |
| Geology | Mhlatuze inlier. #1 Stanhope Mine and Mhlatuze Inlier |
| General Interest | Intro to Zululand |
| Accommodation | Fugitives Drift Lodge (note: variety – Lodge and guest house accommodation) on a FB basis or similar |
| Traveling | Airport to Fugitives Drift Lodge 360 km with one stop |

Lunch (excluding beverages)

Dinner (excluding beverages)

| | |
|-------------------------|---|
| DAY | 2 |
| | Sun 4 Sept |
| Geology | Buffalo River and Nkandla Inliers #2 Ndikwe Fm and intro to Buffalo R geology from the look-out deck at Fugitives drift #3 Short visit to Isandlawan battle site and the Karoo geology #4 Central Syncline view and Agatha Fm Volcanics and Sinqeni Fm #5 Agatha Fm volcanics in road traverse and White Mfolozi Fm sandstones |
| General Interest | Anglo-Zulu war of 1879 |
| Accommodation | Mtonjaneni Lodge (Melmoth) or similar on a BB basis |
| Traveling | To Melmoth 150 km |

Lunch (excluding beverages)

Dinner (excluding beverages)

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|----------------------|--|
| DAY | 3 |
| | Mon 5 Sept |
| Geology | White Mfolozoi inlier Whole day #6 White Umfolozi Traverse Nsuze Group - Matatane Lodge River section Pick up at high level bridge |
| Accommodation | Mtonjaneni Lodge (Melmoth) or similar on a BB basis |
| Traveling | To Melmoth 150 km |

Lunch (excluding beverages)

Dinner (excluding beverages)

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|----------------------|--|
| DAY | 4 |
| | Tues 6 Sept |
| Geology | White Mfolozoi inlier #7 White Umfolozi Mozaan GP – Denny Dalton Mine and glacial pavements? #8 White Umfolozi Mozaan Gp - Mr Greefs Farm, traverse to Banded Iron Formation on river section <i>Must leave after lunch. Cannot do upper volcanics</i> |
| Accommodation | Ithala Game Reserve or similar on a BB basis |
| Traveling | To Ithala 250 km |

Lunch (excluding beverages)

Dinner (excluding beverages)

| | |
|-------------------------|---|
| DAY | 5 |
| | Wed 7 Sept |
| Geology | Lower Nsuze Gp #9 Spectacular panoramic view of the Pongola SG from Ithala. #10 Mantonga Formation on Comondale area incl palaeosaprolite – lowermost unit of the Pongola SG #11 Comondale Greenstone Belt #12 Lower volcanics on Bivane R traverse and Usushwana complex on Koudbad Farm. |
| General Interest | Start day with a short game drive at Ithala Game Reserve |
| Accommodation | Koubad Lodge or similar on a BB basis |
| Traveling | From Ithala to Koudbad Lodge 140 km |

Lunch (excluding beverages)

Dinner (excluding beverages)

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|----------------------|---|
| DAY | 6 |
| | Thurs 8 Sept |
| Geology | Mozaan Gp Hartland area. #13 Stop at Sinqeni Formation near Altona Mine and view conglomerates and Altona Mine BIF. #14 Stop at Klipwal Mine – Diamictite #15 Stop at Tobolsk Lava – topmost unit of the Pongola SG. #16 Stop at Gabela volcanic unit. #17 Mozaan Banded iron formation unit |
| Accommodation | Dusk to Dawn Farm lodge or similar on a BB basis |
| Traveling | Local travel |

Lunch (excluding beverages)

Dinner (excluding beverages)

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|----------------------|--|
| DAY | 7 |
| | Fri 9 Sept |
| Geology | Piet Retief to JHB # 18 Visit to the 3.45 Ga gneissic basement to the PSG at the quarry outside of Piet Retief #19 Stop at Sinqeni Formation along R33 before Amsterdam |
| Accommodation | None |
| Traveling | One transfer: 500 km to OR Tambo Some flights may be leaving early afternoon |

Lunch (excluding beverages)

Minimum persons 20
Maximum Persons 20

COST INCLUDES:

- 1 night accommodation at Fugitives Drift or similar (note: variety – Lodge and guest house) on a FB basis
- 2 nights' accommodation at Mtonjaneni Lodge (Melmoth) or similar on a BB basis
- 1 night accommodation at Ithala Game Reserve or similar on a BB basis
- 1 night accommodation at Koubad Lodge or similar on a BB basis
- 1 night accommodation at Dusk to Dawn Lodge (Piet Retief) or similar on a BB basis
- 7 x lunch (excluding beverages)
- 5 x dinner (excluding beverages)
- Transport in private touring vehicles
- Vehicle E-toll fees
- Local English speaking driver on all transfers
- Driver meals & accommodation where necessary
- Toll fees on the 3rd and 9th September 2016

COST EXCLUDES

- All airfares, air reservations and airport taxes
- All other accommodation
- All beverages
- All other meals
- All other transport
- All tours and any entrance fees
- All other sightseeing
- Any park entrance fees and conservation fees en-route, etc...
- Personal expenses such as tips for meals, gratuities for drivers, all alcoholic and other beverages, telephone calls and laundry, etc...
- Any other services not mentioned above