

KAROO TRANSECT

Basin development, palaeolandscapes and depositional sedimentary environments along a 100 My transect through the Karoo Supergroup with superb three-dimensional exposures containing tetrapod and plant fossil assemblages, therapsid and dinosaur trackways, and the End-Permian and End-Triassic mass extinction events. Return journey to Cape Town is along the scenic Garden Route.



Early Triassic Galesaurus

Field Trip Leaders: Roger Smith and Bruce Rubidge (rsmith@iziko.org.za)

Dates: Post Congress 19-27 August 2016

Start – End: Cape Town - Cape Town

Number of participants: 18 - 28, including 4 guides/drivers

Transport: 2 x 22 seater buses

Brochure: Comprehensive field guide will be issued to every participant

Itinerary:

Day 1: Route summary CT to Laingsburg and back to Matjiesfontein (264 km, 3 hours 28 mins)

Meet delegates at CTICC – drive to Matjiesfontein (check in at Lord Milner Hotel and lunch as a group in dining room) Drive to Laingsburg.

Stop 1: Gats River bed; Dwyka diamictites, Prince Alfred shale dropstones, Collingham turbidites, tuffs and eurypterid tracks

Day 2: Route summary Matjiesfontein to Fraserburg via Sutherland (218km, 3h, 30 mins)

Drive to Verlatenkloof

Stop 2: channel sandstones in Verlatenkloof Pass-continue to Sutherland

Stop 3: Amphibian Trackway surface. Picnic lunch at Observatory, walk around visitor centre - possible



Doing the dinocephalian walk



Iconic Landscape.

Photo: Bruce Rubidge.

guided tour of SALT. Drive to Fraserburg

Stop 4: 16h00-17h00 Tapinocephalus Assemblage Zone (AZ)

Fraserburg dinocephalian trackways and crevasse splay palaeosurface features

Drive to Fraserburg, dinner at Die Kliphuis



Day 3: Route summary Fraserburg to Beaufort West via Oukloof Pass (200km, 3hr)

Drive down Oukloof Pass

Stop 5: Wilgeboschkloof - fossils of Tropicostoma AZ, walk from roadside quarry to Diictodon- rich outcrop.

Drive on to Karoo National Park (KNP)

*Karoo National Park
Beaufort West*

Picnic lunch at Lametjiesleegte picnic spot

Stop 6: walk Pristerognathus AZ Bulkraal sandstone - a high sinuosity multistoried channel sst cliff with uranium mineralization and pedogenically modified overbank sequences. Drive scenic route to top of Klipspringer pass and beyond.

Stop 7: Lower Beaufort lithostratigraphic viewpoint and sundowners overlooking great Karoo. Drive through Beaufort West to scenic Lemoenfontein Safari Lodge.



Day 4: Route summary Lemoenfontein – Graaff Reinet (260km, 3 hours)

Drive back through Beaufort West to Graaff-Reinet,





Progalesaurus from Lootsberg Pass

book into Drostdy (Stretch's Court) – restrooms and coffee. Drive up Ouberg Pass to Doornplaats.

Stop 8: Picnic lunch at house before walking along riverbed behind house up to waterfall – back along track looking at Cistecephalus AZ strata and fossils. Drive back to Valley of Desolation.

Stop 9: Dolerite/Camdeboo overview and sundowners. Drive back to Drostdy Hotel. Dinner.

Day 5: Route summary Graaff- Reinet to Middelburg to Aliwal North (317km, 4hours 12 mins)

Drive to Wellwood

Stop 10: Tour of Wellwood fossil museum and farm.

Drive up Old Wapadsberg Pass

Stop 11: Permian-Triassic Boundary; walk through a mass extinction

Picnic lunch on the boundary /weather permitting.

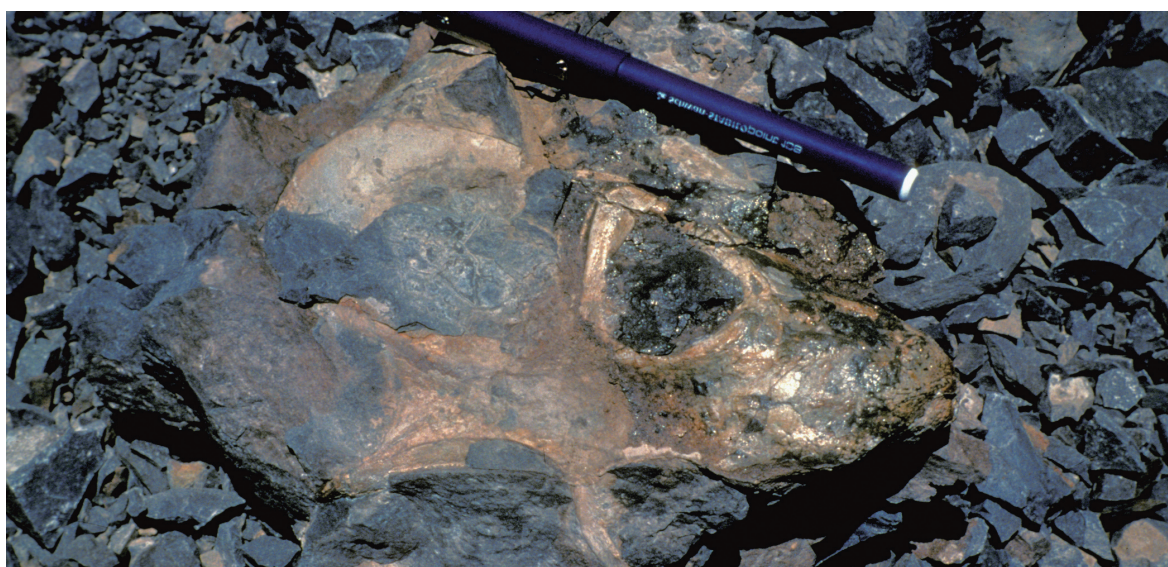
Drive to Middelburg- Burgersdorp

Stop 12: Burgersdorp sandstone/mudstone section in roadcut

Stop 13: Silicified ?Triassic logs

Drive to Burgersdorp and on to Aliwal North. Dinner at Umtali Country Inn

Day 6: Route summary Aliwal North-Lady Grey-Barkly East-Mountain Shadows Hotel (181 km 2hr 38 min)



Oudenodon skull being excavated





Elliot outcrop-Bramleyshoek



Wilderness



Lystrosaurus declivis

Drive to Lady Grey

Stop 14: Molteno Fm roadcut section –sedimentology of a humid braid plain.

Drive to top of Barkly Pass (Mountain Shadows Hotel) Picnic Lunch. Drive to base of pass.

Stop 15: Slow walk up Barkly Pass – Lower Elliot to Upper Elliot to Clarens – spectacular fluvial redbed succession culminating in aeolian dunes with conchostracan strewn playa facies and Drakensberg volcanics.

Drive to Mountain Shadows Hotel. Dinner.

Day 7: Mountain Shadows Hotel to Addo via Katberg Pass and Grahamstown – (447 km, 6 hrs 37 mins) Geology and touristic activities. Stay at Addo Elephant Park

Day 8: Addo to Wilderness- (360 km, 5 hours 3 mins) Game viewing in Addo Park. Tsitsikamma forest. Storms River Bridge. Natures Valley, stay at Wilderness Holiday Inn. Sundowner beach walk and fish braai.

Day 9: Wilderness to CT – (442 km, 5 hours 28 mins) Visit to Knysna Heads. L - with loop through Kleinmond, Bettys Bay, Gordons Bay. Last picnic lunch at Rooi Els. Drive to CTICC.