

# Indian Hot Springs Ranch

Peter Berresford and Martin Terry

The authors report the findings of their exploration of a ranch in Hudspeth County, Texas. Photography by Peter Berresford.



Fig. 1 Location of Indian Hot Springs Ranch

Early in July 2016 an opportunity arose to study the cacti in an area of Texas which, as far as we were aware, had not been studied extensively in recent years due to the fact that the property had been closed to the public. Indian Hot Springs Ranch lies in Hudspeth

County which is bordered by El Paso County to the west and Culberson County to the east, with Jeff Davis and Presidio Counties lying to the south-east. Hudspeth County's irregular south-western border is the Rio Grande, which forms the international boundary between far West Texas and the neighbouring state of Chihuahua in Mexico (Fig. 1). The small town of Sierra Blanca on Interstate 10 provides access to the southbound 'Ranch to Market Road 1111' and fairly quickly you are driving past large tracts of open land which is privately owned. Small ranch buildings appear a long way in the distance along this road, which after 10km leaves the tarmac behind and nothing but dirt road remains for the next two days.

All ranches on the US side of the Rio Grande face the inevitable incursion of 'illegals' crossing the river in search of a better life, and ranchers call on local Border Patrol officers to help on those infrequent occasions

Fig. 2 The Chihuahuan desert – peppered with *Fouquieria splendens*







Fig. 3 The pink beacon of *Echinocactus horizontalionius*



Fig. 4 *Echinocereus enneacanthus* basks in the heat of the mud flats



Fig. 5 A healthy clump of *E. coccineus* subsp. *rosei*

when there are problems resulting from such events. A few years ago along the stretch of the Rio Grande upstream closer to Juarez, there were turf wars between competing cartels seeking to gain control of small Mexican villages from which contraband or cargo consisting of illegal immigrants could be transported across the shallower parts of the river, where northbound transport is arranged – or where a long walk across the unforgiving desert begins for the immigrants entering the ‘Promised Land’ on foot. However nowadays there is no evidence of cartel activity anywhere near the Indian Hot Springs Ranch, and a pack of five free-roaming dogs on the ranch helps to discourage unscheduled visits from illegal immigrants.

Several taxa of cacti have been recorded from the area near to Sierra Blanca as we leave the tarmac behind. Travelling in a south-westerly direction, we note that the marker plant for the Chihuahuan desert eco-region, *Agave lechuguilla*, begins to appear, with sporadic populations of *Fouquieria splendens* (Fig. 2). (The specific epithet *lechuguilla* is the Spanish for ‘little lettuce’, a classic example of the Iberian irony of the 16th-Century Conquistadores, as these tough, heavily-armed plants are about as un-lettuce-like as one could imagine.) From Sierra Blanca we have dropped around 50m in altitude to 1,340m, where a little bright pink ‘beacon’ promotes



**Fig. 6** Several species growing on a small hill including *E. stramineus* and *E. dasyacanthus*

**Fig. 7** The 'end of the road' for this vehicle

**Fig. 8** *E. stramineus* in flower

an involuntary reflex request to stop the car. We back up and on the south side there is a small hill with *Echinocactus horizontalionius* in full flower (Fig. 3). Only a little further on we enter a large flat plain, and it really is like being in Mexico. On the dried mud amidst clumps of *Larrea tridentata*, *Echinocereus enneacanthus* basks in the 40°C July heat (Fig. 4). The plain ends, but the road maintains the same altitude around the base of a hill, then rises to 1,500m. No flowers this time, but a healthy clump of *Echinocereus coccineus* subsp. *rosei* grows within easy sight of the vehicle (Fig. 5). As one of us (PB) had found this subspecies in the Van Horn Mountains some years ago, this came as no surprise. This is a prolific site and as we explore a little, *Escobaria tuberculosa*, *Echinocactus horizontalionius*, *Echinocereus dasyacanthus*, *E. stramineus* and *Opuntia macrocentra* are all in evidence here, growing on the grey/brown limestone (Fig. 6).

The road descends and we encounter what remains of a rusted old saloon peppered with gunshot (Fig. 7), and shortly after we pass the only occupied Border Patrol vehicle we see in the next two days. We drop down to 1,080m towards the Rio Grande and follow it to the south-east for some 16km. From the dirt road we can see the small settlement of Cajonitos (literally 'little boxes') only 500m south of the river on the







Fig. 9 The entrance to Indian Hot Springs Ranch



Fig. 10 The complex of ranch buildings close to the Rio Grande and Chihuahua



Fig. 11 The Polaris driven by Terrye Shirley

Mexican side. Our road passes through a road-cut (where the road cuts through a hill, creating steep, almost vertical slopes on both sides of the road), and *E. stramineus* beckons again from the side, but this time with some late flowers in the shade of *Fouquieria splendens* (Fig. 8). The colour variation in the spines of *E. stramineus* is considerable; one clump here, presumably sporting two different clones, shows paler, fresh spines on one side of the clump and golden spines on the other, and the colour of the epidermis on two adjacent plants appears in two distinct shades of green.

A long way down the road, the entrance gate to the ranch has been left open for us (Fig. 9). Even then it is several more miles into the ranch before we start to see the ranch buildings and the Sierra Los Cajones of Chihuahua on the other side of the Rio Grande (Fig. 10).

Indian Hot Springs Ranch dates from 1906, but human activity in the area precedes this by many years, including an unknown number of years during which it was part of the homeland of the Comanche nation. The name of the ranch indicates its particular use by the indigenous people as a natural area for bathing in the several geothermal hot springs, one of which is of unknown depth and quietly bubbles away. Other springs are thought to appear where water carried by rock strata breaches the surface





Fig. 12 A low-lying *E. stramineus*



Fig. 13 Variation in *E. stramineus* growing side by side with *E. enneacanthus*





**Fig. 14** The Rio Grande at Mayfield Canyon

building (La Cantina) which also boasts a sizeable kitchen, so while Martin and Deirdre (Martin's wife) caught up with emails, I slipped out into the last hour or so of daylight and climbed to the top of the hill overlooking the ranch to take some shots of the ranch and the mountains of Mexico. Later we retired to our rooms, all situated in a block opposite. Work is progressing on the buildings so there are currently no en-suite facilities. A purpose-built shower block a few metres away

through fissures. A short distance from the main accommodation is a bath-house with separate rooms for male and female bathers in the natural, mineral-rich hot water. The ranch is also of historical importance to Texas as several buffalo soldiers (as African American soldiers were called by American Indians in the latter half of the 19th century) lost their lives during the clearance and relocation of the Comanches from the land. Their bodies were discovered some twenty years ago and interred in individual graves marking their sacrifice.

Geologically the area approaching the ranch and around Indian Springs contains a number of different rock types ranging from granite, through grey shales to metamorphosed limestone. Many of the rocks have been subjected to different processes over the aeons, resulting in folded and tilted strata and the creation of many ridges. The development of such a diversity of potential habitats naturally provides ample opportunity for differing combinations of plants with their individual requirements.

Management of the 8,900-acre ranch is undertaken by Terrye Shirley, who arranged our accommodation and guidance to various habitats using a formidable, open four-wheel drive vehicle called a Polaris (Fig.11). In the cooler temperatures of late afternoon before the sun disappeared, Terrye took us to see the Hot Springs in the Polaris, accompanied by the five dogs which live on the ranch. We soon got to know the pack and, together with early morning, this was their time of day when they roamed freely instead of trying to avoid the heat of the day. Surprisingly for an area so remote, Wi-Fi and TV are available at the ranch in the main

from the accommodation provides an interesting and refreshingly different experience in the morning.

Apart from the flora, the ranch boasts a diversity of animal and bird life. Driving along the tracks, frequent encounters take place with road runners, 'cotton-tail' and 'jack' rabbits and quail (including surprisingly small but totally mobile baby quail that move their tiny legs with incredible speed to keep up with their parents). After the recent rains the mesquite and grass were growing prodigiously, and the occasional cattle and horses encountered on tracks looked healthy and well fed. A large shallow lake topped up by the storm revealed a number of egrets and herons. The ranch itself is home to swallows nesting in the outhouses. At this time of year, the early morning is the best time to be out exploring, before the temperature reaches 40°C at midday. Sunsets over the hills are dramatic, and as the light fades the bats emerge from the buildings under restoration.

We arranged with Terrye to be up early in the cool of the morning. The go-anywhere agility of the Polaris, combined with Terrye's knowledge of the trails on the ranch, were huge assets in finding plants and seeing habitats of which we had no knowledge. Heading south-east from the ranch buildings, we found ourselves in a gully and as the vehicle was completely open, we quickly learnt to keep our arms away from the sides of the Polaris as spiny vegetation whipped the frame of our transport.

On the south-facing slope of this gully it was a surprise to see a flowering *Echinocereus stramineus* at an altitude of 1,040m, lower than its normal range (Fig. 12). *Echinocactus horizonthalonius* also grew here, but



**Fig. 15** A transitional form of *E. coccineus* subsp. *transpecosensis* not far from the type location

**Fig. 16** A large, but stressed clump of *Ariocarpus fissuratus*

unlike the plants we had seen on the way to the ranch in the plain, the sheltered location of this gully and comparative lack of sun meant these plants were not quite ready to flower even though *E. stramineus* was in bloom. Our track now closely followed the Rio Grande which lay perhaps 5m to the south, just beyond a wire fence. Cacti still appeared on the slope on the other side of our route but we were not prepared for what we saw next. Growing on the slope was another flowering *E. stramineus* side by side with *E. enneacanthus*. Normally these two morphologically similar taxa do not meet, the former (which is tetraploid) preferring rocky hills whilst the latter (which is diploid) grows on the plain – indeed we had already seen evidence of this on the way to the ranch – but growing in the middle of the two was a different form of *E. stramineus* which was in fruit (Fig. 13). Our first thoughts were that maybe this was a hybrid, but then we knew we had already seen considerable variation in *E. stramineus*, and a rib count of 10 revealed the higher number of ribs consistent with this taxon.

This gully led to Mayfield Canyon which intersects with the Rio Grande, which appeared as we rounded a corner. The water here was ankle-deep and only about a metre wide in places, and it would have been a simple exercise to cross into Mexico. There were no walls, high fences or indication of any border here other than the river







Fig. 17 A young, healthy *A. fissuratus*



Fig. 18 Storm clouds darken over the accommodation block

(Fig. 14). There were also no cacti, and having dropped some gentle hints to our driver, we were soon 'back on track' heading north away from the river. The route, swinging east, took us across land belonging to neighbours with whom Indian Hot Springs has a reciprocal access agreement. We opened and closed many Texas-style gates called 'gaps', which consisted of two or three strands of barbed wire stapled to suspended vertical poles, one of which (the one that travels in an arc when the gap opens) is secured at its top end by a hoop of wire to a sturdy post in the ground, thus closing the gap. Travellers in Mexico will be familiar with these but Europeans in the US without access to private ranch-land, may not be. We passed some fine views across broad canyons and healthy specimens of what we initially thought was *E. coccineus* subsp. *rosei* but closer inspection revealed differences from the earlier plant (Fig. 5) suggesting that the ranch is in the zone of intergradation between *E. coccineus*

subsp. *transpecosensis* and *E. coccineus* subsp. *rosei* (Fig. 15). Prominent flower scars indicated it had flowered a few months ago.

Finally we started to head south again back in the direction of the river between two low ridges. Our progress naturally halted as the track petered out in front of another ridge. Terrye knew exactly where she was taking us and had told us about some 'living rock' plants. Indeed she had taken one of these for her cactus garden at the ranch and Martin kindly gave her cultivation advice. Of course, *Ariocarpus fissuratus* do not take much finding in Mexico but in the US they occupy a relatively small region in western Texas and are considered by many to be something of a rarity, perhaps due to a combination of land not being as accessible and over-zealous cactus collectors who cannot resist the temptation to take one for their collection. First signs were encouraging as we found *Echinocereus dasyacanthus* on the slopes on our way to the top of the ridge but then as we wandered along the top *A. fissuratus* began to appear amongst the *Euphorbia antisiphilitica* and fragmented grey and orange-coloured shale (Fig. 16). At 1,190m, many of these plants, growing in the open, were showing signs of stress, with only a small growing area in the centre of the plant, but we found some which were healthier examples of the plant (Fig. 17). As evening approached the sky darkened with black storm-clouds over the accommodation block (Fig. 18), and even before the rain started we were treated to a long display of forked lightning marking a dramatic end to our short stay at Indian Hot Springs.

We would like to thank Terrye Shirley for giving us so much of her time and for showing us the flora of the ranch. If you would like to spend some time on the ranch, details can be obtained from Terrye Shirley by email: baybrook1@yahoo.com A four-wheel-drive vehicle is highly recommended for the drive between Sierra Blanca and Indian Hot Springs Ranch.

Peter Berresford  
Nelson House, Calton, Skipton, North Yorkshire,  
BD23 4AD, UK.

Email: peter.berresford@virgin.net

Martin Terry, Associate Professor,  
Department of Biology, Geology and Physical Sciences,  
Sul Ross State University, Alpine, Texas 79832, USA.

Email: mterry@sulross.edu

Layout by David Quail