Lekking is a unique and immensely interesting behaviour exhibited by male blackbucks. Here’s an account of this rare activity sighted at the Velavadar Blackbuck National Park in Gujarat.

Males on Display!

THe semi-arid parts of Gujarat, just as other arid regions, go through different seasons of extremes. There is extreme cold in winter, then there is extreme heat in summer and when the clouds decide to precipitate during the monsoon, they can bring floods in otherwise drought-prone lands. And, in these extremes unique landscapes survive that are home to even more unique plants and animals.

One such beautiful landscape of the semi-arid region of Gujarat is its grassland. And, one of the best places to see grasslands thrive is the Blackbuck National Park, Velavadar, in the plain Bhal area of Saurashtra.

Velavadar is not far from the city of Bhavnagar, which was once a state. The royal family of the state of Bhavnagar used this grassland as their hunting grounds—for shooting game animals, for falconry (an art of hunting with birds of prey), and for coursing with trained cheetahs that were used to hunt game animals. Today the same land is a national park, home to diverse species, among which are the plant-eating blackbuck (*Antilope cervicapra*) and nilgai (*Boselaphus tragocamelus*), meat eating canids, namely wolves (*Canis lupus*), jackals (*Canis aureus*), foxes (*Vulpes bengalensis*) and hyenas (*Hyaena hyaena*), and a number of birds most of which are winter visitors from far off places.

The grassland ecosystem goes through very interesting changes. As the season changes, this ecosystem plays a game with colours. The landscape becomes lush green in the monsoon as the rains feed the dried grass of the previous season. Then slowly the grass dries through the cold and dry winter, turning in to different shades of green, brown and yellow. The mosaic of different kinds of grasses contributes to this colour, some drier than the others. In peak summer, when most of the grass is dry, the landscape looks like flames of fire. The moisture from the soil and the grass is taken away by the hot winds, which make the dry grass rustle with excitement.

Sometime in February-March and between September and December, there is a big show that is seen every year in the drying grassland. It lasts for about a few weeks. It is a show by the blackbuck. This is their peak mating season, the time when males display to attract females.

Blackbucks are antelopes and belong to the family of cows and goats. They have horns made of the same material as our hair. Males have beautiful spiral horns that give them an elegant look. The females, on the other hand, are yellowish fawn coloured and so are all the young ones. Young males grow horns by adding a spiral to their crown of horns each year. Most males turn into a beautiful black and white, which becomes even more prominent during the mating season.

Blackbucks are only found in the Indian subcontinent. They are known to prefer open grasslands and scrublands. During the mating season mature blackbuck males use a series of actions and sounds like a well-choreographed dance, to attract more and more females. To attract females, the male blackbuck displays a rare and unique mating system known as...
lekking. One of nature’s shows worth seeing!

I happened to be lucky to be able to see this show, during my dissertation study at the Blackbuck National Park. It was my guide, Kavita Isvaran, from the Indian Institute of Sciences, Bangalore, who introduced me to this beautiful system. She has spent several years doing very interesting research on blackbuck mating, both within Velavadar and in other parts of the country. The interest with which she shared with me the subtle behaviours of the blackbuck, in her usual soft and polite voice, made the learning even more enjoyable and special.

Every year at a particular place in the grassland, males in their prime, most of which are black on the top, white below with elegant long horns and large curious eyes (on the lookout for danger from predators), gather and start marking their territories. Each male’s territory has within it one or more saucer-shaped dung piles, where he defecates and urinates multiple times and sits and rubs his secretions on small blades of grass in the vicinity. This is done to signal to other males and interested females. It is like putting a nameplate in front of your house. The male also guards his territory from other intruding males. This aggregation of male territories is known as a ‘lek’ and the behaviour is known as ‘lekking’.

The lek is a very dynamic place. As more and more males gather, newer territories are formed, some older ones get divided between two or three males and stronger males replace weaker ones. During peak lekking, which is when females start visiting the lek, there can be more than a hundred blackbuck males in an area the size of a football ground, looking like men in black suits at a busy market place. Females enter the lek in small groups or solitarily and inspect the different male territories and take notice of the male’s displays. The females get to choose a male from all the males at the lek, who are trying hard to impress the females! At this time the lek is full of excitement and apparent chaos. Females are the main reason for all this display and fights!

On careful observation one can tell who is doing what. Some males are displaying to females and

It is only with the dedicated efforts of the management in conjunction with more scientific studies can such wonderful landscapes and magnificent creatures be preserved for posterity.
neighbouring males by holding their noses in the air and making peculiar grunting calls. Some males are busy chasing intruders from one end of the lek to the other. Some others are engaged in a very elegant and elaborate ritual that begins with two males, who wish to challenge each other, walking parallel to each other, in an elegant gentlemanly fashion. This way they check each other’s strength and potential.

Parallel walks sometimes are followed by more aggressive fights if both males feel they can put the other one down. They move to the next stage, the ritualised fight, where their heads hit each other’s for a second or so. The ritualised fights and the walks continue for a while, and if these don’t help decide the winner, they then move on to the final step—the fight! They lock antlers with full force making a far-reaching sound like when two sticks are hit against each other with great force. The competitors push each other with great force (which at times looks hilarious). The losing male would suddenly detach his horns and back out. Males often have their horns broken permanently in the process. On some occasions such fights have been fatal.

All the activity on the lek is not just by the males. The females that visit have their roles too. They seem to have something that is best described by the word ‘jealousy’. If a popular male begins to fancy a particular female, another female out of ‘jealousy’ will try to push that female away. Then there are the young males who have no big roles to play during lekking but they also appear at the lek and often take the role of trouble makers. They go and disturb a female that has nearly decided on which male would be best for her. So the males dislike young males around and keep trying to keep them out of the way. Gathering data is exhaustive and full of activity during these weeks. And of course, lots of fun to watch.

However, this big blackbuck show has an even bigger purpose—to help females choose stronger males, to ensure that her young ones are strong and can survive better. This is essential to ensure the population remains healthy. After a few weeks of excitement, things at the lek begin to slow down and lekking gets over. Males and females move about in large groups and some remain solitary. Those females that chose their mates would give birth to the next generation of blackbuck in the next four to five months by which time the monsoon would probably let the grass grow to provide food for the young ones.

It is sad to notice that this unique behaviour is little appreciated by most tourists who visit the park. We fail to ask questions like ‘why are there so many male blackbuck in this small area?’ Answers to such questions would help us better understand the landscape and its importance. Such large congregation of blackbuck males is only seen in Velavadar due the nature of the landscape. Blackbuck need open grasslands for lekking. The lack of which would threaten this rare mating system.

The park management has a number of challenges to face for the conservation of the grasslands and unique species and their behaviours (such as the blackbuck and lekking). More often than not, conservation challenges require multi-fold measures that are seldom scientifically proven to be fail-proof. It is only with the dedicated efforts of the management in conjunction with more scientific studies can such wonderful landscapes and magnificent creatures be preserved for posterity. And for this, it is essential we know the beauty and importance of what we are seeing and conserving.

Ms Shivani Jadeja has completed the Post-Graduate Programme in Wildlife Biology and Conservation from the National Centre for Biological Sciences, GKVK Campus, Bangalore-560065; Email: shivanivj@ncbs.res.in