Wildlife ACT: Translocation of Large Carnivores at Tembe Elephant Park

Internship Report

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Of the many different methods and techniques involved in the field of wildlife conservation, the translocation of large carnivores is one that few individuals, and especially volunteers,are able to take part in.Nonetheless, it still plays a vital role in the protection of numerous threatened species. Among the most prominent of these roles is the importance of maintaining genetic diversity within a population. During my stay at Tembe Elephant Park, I learned that lion numbers in the area had grown exponentially and exploded to 70 animals from merely four individuals. Removing several from the park, in addition to bringing in new members of the species, was therefore a vital task at hand. Yet another reason to move large mammals to new locations is associated with maintaining ecological balance. Given that lion numbers drastically increased at Tembe, the already threatened African wild dog population further declined, pointing out the need to remove some of the cats from the reserve. A third reason to translocate animals is to potentially support and stabilize population structure. Tembe currently has no proper lion prides, resulting in groups of closely related females spending time together while the males move around mating with theselionesses. Not only does this prevent a family structure from forming where cubs are protected by a group, but it also worsens the inbreeding problem as mating occurs between closely related individuals. A final reason translocation might be important is to move problem animals to other regions. The 14 wild dogs in one of Tembe’s bomas, for example, were placed in confinement because of conflict with the local communities. Currently there is a court case in procession; if it decides in favor of moving them to another larger reserve, as opposed to keeping them where they are now, there is a chance that conflict could be reduced.

In order to carry out the process of translocating a large carnivore, several different techniques are utilized. The first is monitoring using telemetry, camera traps, and daily tracking and recording of data in addition to identification kits. Radio collars attached to the study animals of interest enable telemetry tracking by monitors to find and monitor these individuals and their movements.Camera traps are additionally a convenient way to perform these tasks with the advantage of being able to recordan animal’s movements at nightwhen many species are primarily active. Daily monitoring comes into play as well sincethe data obtained from telemetry equipment and camera checks is recorded on data sheets; this information is then entered into digital spreadsheets, stored, and kept on record. Any fresh tracks and visual sightings on these morning and evening excursions are noted too. Once back at camp, identification kits help monitors identify individuals from camera photos; this is especially important if there is a particular individual that needs to be relocated. Finally, all this information can then be utilized to make note of the species’ movements to determine a proper place to draw it in for a call-up, which is the second technique. Here a carcass is tied to a fence at the place of interest in such a way that the animals are forced to face a direction where a tranquilizer dart can be effectively used. Sounds of a dying animal are then played on repeat as a lure while all monitors and rangers involved sit inside closed vehicles with windows up. Often such call-ups may last for hours without success, resulting in late nights. Nonetheless, when successful, the animals are asleep within a matter of minutes, allowing for a safe relocation where the individuals are given a health inspection, identified, and placed onto the back of a truck using mats. Face masks are used as well to both ensure the animals remain asleep and to protect their eyes from obtaining injuries or drying out during immobilization.

During my experience at Tembe, the aim was to remove four young lionesses from the reserve and bring in two new males to primarily increase genetic diversity and help establish a pride system in the future. I was fortunate enough to witness the fruits of my efforts for the former. Given that the managers were not after any particular individuals, data from camera traps, fresh tracks, and visual sightings were most useful. Moreover, to increase the number of photo captures, fresh carcasses were tied next to the devices. Telemetry equipment didn’t offer support in locating these lions, as these subadults were not collared. Additionally, being ready to leave at any moment’s notice was critical as wellsince a sighting by a park ranger in the afternoon could result in a successful call-up later that evening. Moving camps became important too as the targeted lionesses residedin the northern part of the reserve as opposed to the south where the main camp was situated. This also involved sudden changes of plan; at one point my volunteer group woke up to a note from our monitor at 5:00 in the morning telling us to be ready within an hour to head back up north the day after we had come back. At the end of the day, though, it was all worth it. The four young lionesses are currently in the process of being moved to Gorangosa Park in Mozambique where they will have far more area to roam free. Ultimately, this success highlights that though the translocation of large carnivores is a rarer eventthan other environmental experiences, it still plays a vital role in the field of wildlife conservation.