Javan Rhino Conservation Program

Report submitted by the International Rhino Foundation, 27 October 2010

The goal of this program is to expand the habitat available to Javan rhinos in Indonesia. Over the long-term, this habitat expansion should lead to an increase in the species' population, which will eventually allow us to translocate rhinos to a second habitat, creating an "insurance" population to help protect the species from extinction.

Our primary objective is to establish a 4,000 hectare Javan rhino research and conservation area with intensified active management inside the Gunung Honje area of Ujung Kulon National Park. Specific objectives for 2010 - 2012 include:

- Facilitate change in park zonation and obtain all required permits for construction and habitat management activities.
- Improve habitat for Javan rhinos by clearing invasive species and replanting areas with rhino food plants, and by creating a permanent water supply, permanent wallows, and saltlicks.
- Enhance rhino protection by installing electric fence, creating a patrol path, and constructing guard posts.
- Conduct awareness and socialization activities with local communities to build support for the new conservation and study area.
- Hire and train new Rhino Protection Unit to monitor and protect the expanded population and the overall habitat.

Project Activities

Facilitate change in park zonation and obtain all required permits for construction and habitat management activities.

On June 21, 2010, the Government of Indonesia formally launched the Javan Rhino Study and Conservation Area (JRSCA). Minister of Forestry, Zulkiefli Hasan, and Banten Province Governor, Ratu Atut Chosiyah, presided over the launch.

Our staff then held a workshop with government agencies, NGOs and local communities to begin the process of obtaining a change in park zonation and other required permits. Staff have already met with Ministry of Forestry and Park staff, along with other stakeholders, multiple times to discuss and propose the re-zoning of Ujung Kulon NP as necessary to legally allow all activities related to the construction of the JRSCA.

The government requested another Environmental Risk Assessment (ERA) prior to recommending re-zonation; this was conducted by WWF-Indonesia, with input from our staff on the ground. Initial results have been presented to PHKA (Perlindungan Hutan dan Konservasi Alam, the Forest Protection and Nature Conservation directorate of the Ministry of Forestry) and other stakeholders; a formal report will be issued soon. We received governmental permission to begin work on constructing the JRSCA while the ERA is being finalized and while the process of obtaining park re-zonation is underway. (The Ministry of Forestry and Park staff are particularly concerned about the continued spread of invasive arenga palm and want habitat management activities to begin as soon as possible.)

On October 1, 2010, PHKA officially instructed the Director of Ujung Kulon National Park to begin work on the habitat management activities necessary to create the JRSCA. From October 7 – 11, 2010, our staff met with the Director of Ujung Kulon National Park to review the workplan for project start-up. Director Agus Priambudi approved the JRSCA Work plan, organizational chart, project personnel, and terms of reference. (Our local partner has now begun recruiting for the approved new staff positions.)

The Minister of Forestry and Governor of Banten Province check the first piece of electric fence, erected during the official launch of the JRSCA.

After the ERA is finalized, we will hold another workshop with the appropriate government staff and will provide all materials necessary, including maps and satellite photos, to obtain the final PHKA decree for re-zonation and permits.

Improve habitat for Javan rhinos by clearing invasive species and replanting areas with rhino food plants, and by creating a permanent water supply, permanent wallows, and saltlicks.

There are already two–four Javan rhinos living in the Gunung Honje area. To ensure that this area can support a larger rhino population, we must actively manage it to increase/improve rhino "necessities" – water, wallows, saltlicks, and appropriate food plants. This will include replanting natural forest vegetation with rhino food plants in some areas, and carefully implementing controlled slash and burn patch management in designated and closed forest areas to promote regeneration of rhino food plants. Infestation by Langkap (Arenga) palm, an invasive species that poses a serious threat to rhino food plants, will be reduced.

Last month (September 2010), IRF's Asian Rhino Coordinator, Dr. Bibhab K. Talukdar, and Indonesia Coordinator, Sectionov, travelled to Gunung Honje, accompanied by a GIS Specialist from Indian NGO Aaranyak, Pranjit Sarma. While surveying Ujung Kulon NP with the RPUs there, they found that there are several locations in Ujung Kulon where Langkap (Arenga obtusifolia) grows dominantly. Langkap, or arenga palm, is an invasive species that now exists in nearly all areas of Ujung Kulon. The spread of langkap in Ujung Kulon National Park has been responsible for killing other vegetation, especially vegetation that the Javan rhinos feed on. Where Arenga palm dominates, nothing else grows. The palm covers vast areas of forest; these areas cannot now provide suitable food for rhinos. In order to increase rhino food plant availability, we will conduct eradication trials of Arenga palm on a medium-sized scale, as an experiment to monitor rhino food plant development in these treated areas.

We have selected a site within Gunung Honje for the initial eradication and re-planting plot which is home to Gunung Honje's current rhino population (2 - 4 animals) and has the most suitable rhino habitat to start. Accompanied by national park and government staff, our team recently completed a site survey of the proposed rehabilitation area.

When assessing the most appropriate site for the Javan rhino habitat expansion program, we had to determine how many people were living in the area, and work with government authorities to come up with a possible solution. We found that there were a number of families living within the Gunung Honje boundaries (but there were far fewer families there than in other possible protected areas we also assessed). After the Indonesian government and NGOs working on the project determined that Gunung Honje was our best option for a number of reasons, we began working on a plan to fairly relocate families living inside the park boundaries so that we can make the area as safe as possible for Javan rhinos. The Ujung Kulon National Park authorities successfully negotiated with people living in the Gunung Honje area. To date, they have concluded agreements with 51 families. These families agreed to relocate to outside the park boundaries,

Javan rhino wallow in Gunung Honje.

RPU members, with park staff, surveyed the selected pilot site for habitat management to determine where they will need to remove invasive species, plant rhino food plants, and create/expand wallows.

and they will be eligible to participate in various job opportunities, including construction/development of the Javan rhino conservation and study area. Now that these families have moved, we will work to improve 40 hectares of the previously-settled areas as a rehabilitation plot.

(Javan rhinos require large amount of young growth, normally most abundant in places where the vegetation has been disturbed by natural forces or by man. A large part of their food is collected in places where new growth is within reach, for example, on forest edges, river banks, tree falls, landslides, regenerating forest and abandoned fields.)

To create a plot with appropriate food plants, we are now in the process of recruiting and hiring workers from local villages surrounding Ujung Kulon, to provide an additional source of income to local communities and to help spread awareness and support for Javan rhino conservation. Project and National Park staff will train the local workers and will provide regular and direct supervision. The workers will manually uproot stands of Arenga palm, using basic equipment including chain saws, manual saws, shovels, hoes, and pruning shears.

After the Arenga removal is completed, the Rhino Protection Units and National Park staff will begin regular monitoring of the cleared areas, using geo-spatial technology and direct visits. Effectiveness of new growth of food plants and whether rhinos use these new feeding areas will be determined. We will use this data to provide management recommendations for further habitat improvement throughout the JRSCA.

Our RPUs have already collected data on the areas that rhinos prefer within Gunung Honje, and know the locations of wallows and water. This data was backed-up by information collected during the initial habitat assessment and the subsequent government survey. Based on this data, we have chosen appropriate locations where we will create 5 permanent wallows at appropriate locations using check dams, and where will install 5 salt lick boxes near those wallows. We will survey and redirect some of the waterflow from the main water source to the wallow complex using a water supply duct, to ensure a permanent supply of water for the wallows. Finally, we will build 5 small, submersible bridges to help rhinos access areas of improved habitat.

Enhance rhino protection by installing electric fence, creating a patrol path, and constructing guard posts.

In partnership with park and government authorities, we conducted a preliminary survey to determine the most appropriate track for the electric fence, which will be about 28 km in length. Our small survey team looked at accessibility, topography and position to determine the final fence track (see map). They also indentified a site for the initial base camp and guard post that will allow us to monitor the area closely during construction.

Once again, we hired local workers to clear enough land to construct an electric fence around the borders of the JRSCA, and to erect the fence. (A small, sample piece of electric fence was already erected during the official ceremony for the launch of the conservation and study area.) The electric fence will help prevent contact between Javan rhinos and cattle from surrounding villages. The fence (see design below) will also keep the rhinos who have moved into Gunung

Survey team determining electric fence track.

Survey team determining electric fence track.

Honje in the area, making it easier for our biologists and veterinarians to study them.

Workers have already begun clearing a small, unpaved road along the fence placement. They will construct a 10 meter wide by 20 kilometer long path to enable construction of the fence and regular patrols. We will also build 5 guard posts that RPUs will use to monitor rhinos and to search for illegal poachers or encroachers. These posts will be located near wallows and "high-traffic" areas.

All construction activities will be closely managed by the project's Supervisor for Civil Engineering, who is responsible for ensuring that all activities comply with government regulations and the recommendations of the Environmental Risk Assessment.

Conduct awareness and socialization activities with local communities to build support for the new conservation and study area.

Project staff have already begun holding community meetings in both of the sub-districts in which the JRSCA will be located. They will continue to hold meetings and workshops to educate local community members about the construction of the JRSCA and its importance, and to hear and address community concerns. Working with Ujung Kulon National Park authorities, we are also reaching out to the local government in Pandegelang District and Banten Province, to help ensure their support. Recently the Banten Government invited the Director of Ujung Kulon NP and the Executive Director of Yayasan Badak Indonesia (YABI) to a meeting to discuss making the Javan rhino the official mascot and icon of Banten province, to generate public awareness and pride. We anticipate that work on that campaign will begin soon.

Hire and train new Rhino Protection Units to monitor and protect the expanded population and the overall habitat.

Rhino Protection Units (RPUs) are highly trained four-man anti-poaching teams that intensively patrol key areas within the national park. RPUs deactivate traps and snares and identify and apprehend illegal intruders, including poachers, and investigate crime scenes, thus preventing or reducing the loss of wildlife. Each RPU is led by a wildlife ranger who has qualifications of a civil investigating officer (Penyidik Pegawai Negeri Sipil). The rangers have the authority to carry firearms and arrest suspected poachers; the other three members of the RPU are armed only with pepper spray for subduing uncooperative suspects. Other members are recruited from local communities.

Recruits undergo a rigorous selection process that includes running, swimming, hiking, and other physical activities, followed by an intensive training course. Training includes classroom instruction and field exercises, including navigation, record taking and law enforcement practices. Only candidates that pass the final test are recruited – and competition is fierce. A refresher course is conducted periodically, and a special team of trainers has been formed to provide field training for guards, both from the program and from protection programs in other areas.

During the initial construction phase of the JRSCA, the Gunung Honje area is being patrolled by the 4 RPUs currently operating in Ujung Kulon. After we complete the initial construction phase, we will hire a new RPU to patrol the improved habitat. (Additional RPU manpower will be needed both because the RPUs will need to cover more ground in the improved habitat and monitor more rhinos, while also continuing to patrol the current rhino habitat at the same level, and also because Gunung Honje is surrounded by 19 villages and there is significantly more human pressure there than in other rhino habitats within Ujung Kulon.

RPU member measures rhino footprint indentified during regular patrol in Gunung Honje.