

## Guardian of the Forest

Although most Indonesians draw a blank when the name "babirusa" is mentioned, a British woman has spent a major portion of her life trying to save the endangered mammal. **Aubrey Belford** heads to the jungle to hear her story.

**O**n the back of her bio alone, it's tempting to think of Lynn Clayton as something of an eccentric.

The British zoologist has spent the better part of 15 years living in a remote camp in the rainforests of northern Sulawesi. Clayton, who first came to Sulawesi as an undergraduate at prestigious Oxford University, has devoted her time to the study and preservation of a species little heard of overseas and little appreciated in this country: the babirusa, Sulawesi's "pig-deer".

In the plush lobby of Jakarta's Sultan Hotel, amid foreign businessmen and the city's slick dealmakers, soft-spoken Clayton does not cut an incongruous figure. But an eccentric she is not.

She instead comes across as a collected and pragmatic operator as she describes her work. And it is that quality that has turned her research into a conservation project that is setting an example for environmental protection throughout Indonesia.

The object of her efforts is a charismatic animal – or rather, group of species – found only in the rainforests of Sulawesi. Thought by most to be a relative of the pig, the babirusa is most easily distinguished by its male's four backward-curling tusks. The males are also known to stand up on their hind legs and "box" each other for dominance.

The babirusa is just one of the many endemic species in Sulawesi's unique ecosystem, which draws on Australian and Asian sources for its eclectic and idiosyncratic biodiversity.

Some estimates put the babirusa population at around 10,000. Clayton thinks the number is more like 5,000. By either measure, they are a species under serious threat.

Gorontalo province's Nantu forest is the last real refuge for the babirusa, and the forest has been the center of her efforts over the last decade and a half.

The forest is also one of the rare places where this elusive species, a natural loner, can be seen regularly.

"The special thing about the Nantu forest (is that) there is a natural salt lick in the forest where you can see the babirusa come and congregate," she said.

The salt lick, which she believes contains minerals essential to the babirusa's diet – and may also counteract poisons in the forest fruit they eat – was what drew her to Nantu.

She wasn't the first outsider to stumble across Nantu's unique gathering point.

"Before me there was a hunter, a French old guy in his sixties named Maurice Patry. His dream since he was 13 years old was to see a babirusa in the wild and he'd made about 13 trips to Sulawesi.

"He'd been to the (salt lick) before me but I think it took him such a long time to find the site. He'd been put in jail on Buru Island and things like that. So I went to see him in France, he wouldn't actually tell me where the place was.

"But he gave me a few clues to kind of help me along," she explained.

Clayton finally found the salt lick in 1988. "It was very exciting to find somewhere where you could actually observe the animals. So that was a kind of feeling of triumph over my academic supervisors."

But within one week of her discovery, poachers moved in, killing 18 babirusa. It was this threat that shifted her work from observation to conservation

To appreciate how remote Lynn's camp in the Nantu forest is, you have to travel there.

From Gorontalo's airport, it takes a two-and-a-half-hour drive through pockmarked roads where bitumen is the exception, not the rule. After registering with the police for entry into the protected area, it's then a four-hour ride by wood and bamboo long-boat up the river to the forest guard post. As the river narrows, the water level drops, and the boat becomes something to be pushed rather than ridden.

The Nantu forest has been a protected rainforest reserve since 1999. In 2004, the size of the reserve was nearly doubled by Gorontalo's governor Fadel Muhammad, from 31,000 to 52,000 hectares. It currently runs as a cooperative effort between the UK government's Darwin Initiative, the British

Embassy in Jakarta and the Indonesian Institute of Sciences (LIPI).

Where once babirusa meat poachers and loggers exploited Nantu, Clayton and her Indonesian team have turned the area into a safe haven.

The key to success has been the involvement of local communities, the government, police and even the military. Joint patrols of local residents, the National Police and members of the elite Brimob mobile brigade have been looking out for those threatening the reserve since 1997.

It's a slightly unorthodox approach. There is nothing tree-hugging about Nantu's Brimob "Team Cobra", which contains one veteran of the anti-separatist fight in Aceh.

she concedes it's not a universally popular part of her work at Nantu. "Not everyone thinks it's a good idea."

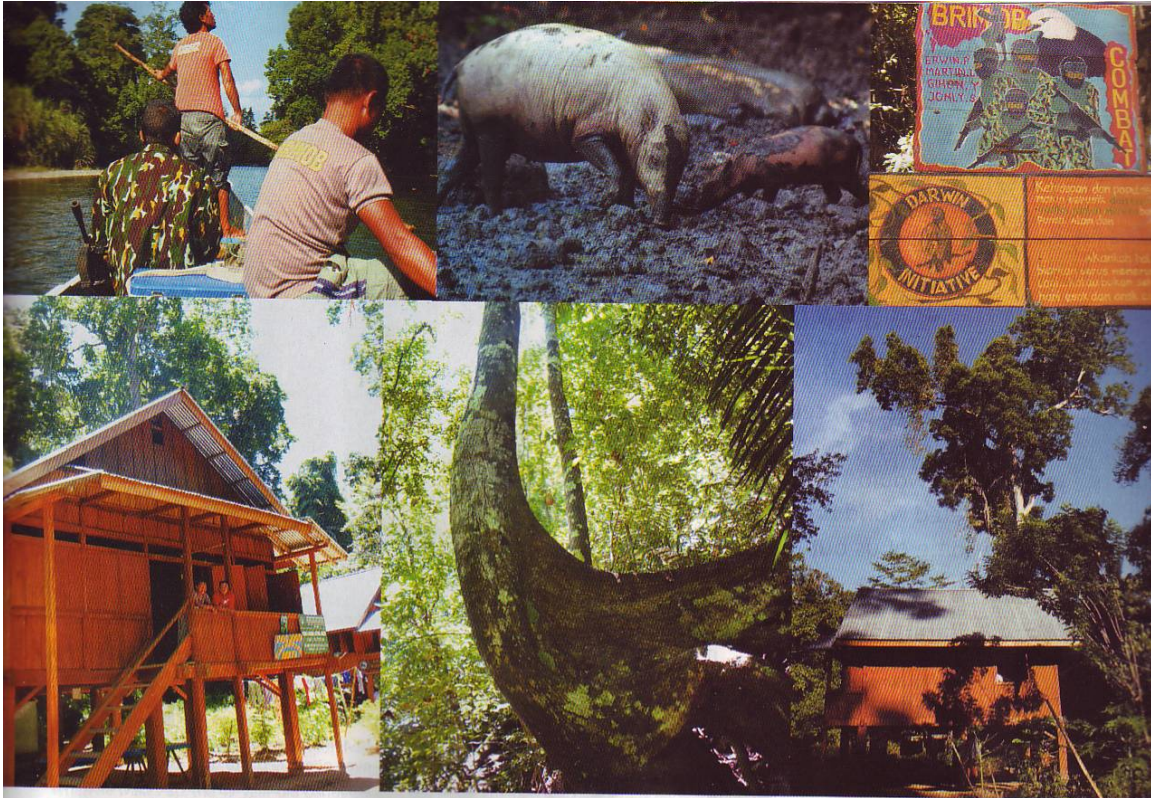
But the patrols have largely worked. Before they started, around 10 rafts of logs would pass the Nantu camp each day. These days, logging activity has drastically decreased, although a sawmill on the northern edge of the park is still a threat.

In 2002 there also was the first successful prosecution of a babirusa meat dealer.

While the patrols have employed some locals, her team also has taken great pains to reach out to the 35,000-odd people living downstream, including the 150 Javanese transmigrants residing a short wade across the river.

A key part of that effort has been education and changing community perceptions. One challenge has been to convince the majority Muslim local residents to care about an animal considered to be haram, or unclean. "In the Muslim context it takes the kind of work of explaining the whole ecosystem and all the species and not just the pig," she explained.

The public education effort has also targeted the area's children. With a filmmaker, she wrote and printed 5,000 copies of a children's book about the babirusa, which is distributed at local schools and other areas in the province.



Clayton herself spends less and less time at Nantu these days, and more time in Gorontalo and Manado drumming up support, money and publicity. The camp itself has also changed. "It's all a bit upmarket now really," she admitted. The hope is that the Nantu forest conservation project can serve as a case study for others in Indonesia. She believes the key lessons to be learned from the project are that both the community and au-

thorities have to be pulled in to conservation work. She says her personal approaches to individuals in authority, particularly in government, police and the military have been vital. But how reproducible is the Nantu model? There is an inescapable possibility that Nantu is a rare case where conservation happens not to clash with powerful local interests, allegedly including rogue elements of the military and police involved in logging.

Clayton is not oblivious to such this, and concedes Nantu may have been immune from such pressures because of its remoteness. Whether the Nantu model can be replicated or not, she insists she'll stay in Sulawesi for the foreseeable future. After so much time and so much success, there really is no other option. Besides, she said, "I don't think I'd still be here if I really missed being at home." ■

- + The babirusa or pig-deer is only found only in Sulawesi and some surrounding islands. Somewhere between 5,000 and 10,000 babirusa remain in the wild.
- + The male babirusa's 'tusks' are in fact overgrown canine teeth. The upper canines are the only mammal canines to grow backwards, piercing the upper lip. Among males, the size of the tusks is taken as a sign of dominance.
- + Although some have proposed that the babirusa's tusks are used in fighting, the males actually fight by standing on their hind legs and "boxing" each other. The babirusa's tusks are too brittle to stand up to the rigors of combat.
- + Babirusa congregate in a mineral-rich natural salt lick in Gorontalo's Nantu forest, which is thought to neutralize poisons in the forest fruit they eat.
- + The greatest risk to the babirusa's existence is the loss of natural habitat and hunting for wild meat markets, particularly in and around Manado. Nantu forest could soon be the only remaining natural habitat where the babirusa can live in the wild.
- + The Nantu forest is also home to the anoa (a kind of dwarf buffalo) and the primates the macaque and spectral tarsier.
- + The babirusa was the first mammal from Sulawesi mentioned in Europe. It was first written about in a 17th century Latin manuscript.