

Maleo Conservation Program Alliance for Tompotika Conservation / Aliansi Konservasi Tompotika July 2022

The Maleo, *Macrocephalon maleo*, is a striking black, white, and pink megapode that lays its eggs at a communal nesting ground and leaves them to be incubated by solar or geothermal heat. The maleo is found only on Indonesia's island of Sulawesi and was recently uplisted by the IUCN to Critically Endangered. The species is #19 on the Zoological Society of London's "EDGE" (Evolutionarily Distinct and Globally Endangered) list of worldwide priority birds, and it is #14 on the government of Indonesia's list of the top-priority species for conservation in that nation, just behind well-known species like tigers and orangutans. The Alliance for Tompotika Conservation / Aliansi Konservasi Tompotika, or "Al-To," in collaboration with local communities, protects and manages the world's healthiest maleo nesting ground in a network with others in eastern central Sulawesi.



A maleo pair excavates a nest pit at AlTo's Taima-Libuun site. Photo: Kevin Schafer

AlTo's Maleo Conservation Approach

AlTo was begun in 2006 at the request of residents of the Tompotika village of Taima, who were witnessing the decline of their local maleos and wished to prevent their disappearance. Ever since Sulawesi's first maleo conservation efforts began in the 1980s, the standard approach throughout the island has been to remove eggs to a hatchery, where they can be protected from poaching and natural predators, and then to release chicks after hatching. But in 2006, taking our cues from nature, the AlTocommunity partnership pioneered a new approach to maleo conservation: rather than interfering with the natural incubation process, AlTo protects the entire nesting ground against poaching by humans, but leaves eggs undisturbed to incubate and hatch naturally. Villagers, including former egg poachers, earn wages for guarding and monitoring the nesting ground, and surrounding forest habitat is also protected.

Under this approach, maleo numbers at the Taima Libuun nesting ground more than quadrupled between 2006 and 2020, as detailed in a recent paper published in Global Ecology and Conservation: <u>Tasirin et al., 2021</u>. Since the paper's publication, growth has continued, and in December 2021 a new world record 118 birds were counted on the nesting ground at once--more than 2-3 times the maximum number of birds seen anywhere else on earth for decades. A video showing the Libuun nesting ground with maleos peacefully at work laying eggs can be viewed <u>here</u> (second row, on right).



Maleos digging nest pits at AlTo's Taima Libuun site. Photo: Sandhy Bawotong

A Landscape-scale approach with three protected sites

Since the successful protection of the Taima-Libuun site in 2006, working with other local villages AlTo has protected two additional sites: the Kaumosongi site, 18 km SE of Libuun, (begun 2014) and the Panganian site, 6 km E of Libuun (begun 2019). As at Libuun, the entire nesting grounds and environs are protected with eggs left undisturbed, and daily guard teams include local villagers. Natural predators such as monitor lizards are not interfered with. As detailed in the paper noted above, Kaumosongi maleo numbers have tripled over five years, and the newest Panganian site, which started with very low numbers and a maximum of only one pair at a time, has also shown good promise with recent counts of three pairs at once. Together, these three sites make up a complex of safe and healthy maleo nesting grounds connected by large areas of intact native forest. A further AlTo program is endeavoring to facilitate permanent government protection of the large forest block to which all three sites connect; some of this has already been achieved, with national "Ekosistem Esensial" designation in 2014.

Research Program

Under permission from the Indonesian government, AlTo Director Marcy Summers and her team are conducting several lines of maleo research that have already yielded results with direct conservation benefits. For instance, information from color-ringed maleos at the Libuun nesting ground provided essential demographic information that informed the IUCN's recent uplisting to CR. Also, results of a range-wide survey of the status of all known Sulawesi nesting grounds will soon be published to provide essential data for the future of maleo conservation efforts.

Outreach Programs



In addition to AlTo's field & research programs, equally important are a set of outreach programs that help educate Sulawesi's human residents about the plight of the maleo and encourage them to love and care for this iconic and irreplaceable mascot of their remarkable island. A centerpiece of AlTo's outreach

In AlTo's Maleo Awareness Campaigns, schoolchildren go home with stickers, posters, and other materials to keep the conservation message strong and ever-present.

program is an ongoing Conservation Awareness program in Tompotika's schools; under this program, all of the more than 125 primary, middle, and high schools in the region have been visited at least one or more times with interactive Maleo Conservation presentations and events put on by trained AlTo staff.

AlTo also organizes **Field Trips to the Maleo Nesting Ground**, so that small groups of children and adults can travel to and witness for themselves the maleos' unique nesting behaviors. There is nothing better than direct experience to help Tompotika residents fall in love with their marvelous maleo!



Schoolkids observe nesting maleos on one of AlTo's Field Trips. Photo: Noval Suling



Another key part of AlTo's Outreach efforts is the **Tompotika International Maleo and Sea Turtle Festival**, which takes place about every two years in multiple Tompotika villages. Through this event, thousands of children and adults from throughout the Tompotika region take part in drama, music, games, and other community activities all centered around conservation of the maleo and the rest of Sulawesi's natural heritage. A video about AlTo's Festival can be seen here (top row, on right)







AlTo's Festival spotlights the maleo through joyful community activities. Photos: Acca, Keith Brofsky, Noval Suling

Future Directions for AlTo's Maleo Efforts

In the years ahead, AlTo has big plans for deepening and expanding our maleo conservation efforts. These include establishing school-based "conservation hero" clubs where kids can get more deeply involved in maleo conservation activities; a range of annual community events in Tompotika's gateway city, Luwuk, centered around World Maleo Day on November 21; and helping local groups in high-potential maleo conservation areas outside of Tompotika to initiate new AlTo-style community-based programs to protect nesting grounds.