

## Tracing Bugis ethnicity through the existence of yellow-crested cockatoo in Masakambing Island, Indonesia

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### ABSTRACT

Masakambing Island has administratively located in the District of Masalembu, Sumenep Regency, East Java province, Indonesia. This island is an endemic habitat for the yellow-crested cockatoo sub-species *abbotti* (*Cacatua sulphurea abbotti*). This research aims to discover the history of the people inhabiting Masakambing island and traces of Bugis culture through the existence of the yellow-crested cockatoo. The study was conducted using a qualitative method with an ethnographic design. The study results show that the origin people who inhabited this island were from the Bugis ethnic group. The local name *Beka'* reflects how the yellow-crested cockatoo is very close to Bugis culture on Masakambing island. Besides, the Bugis ethnic who inhabit Sulawesi island is familiar with the yellow-crested cockatoo, sub-species *sulphurea*, and *djampea*. The existence of yellow-crested cockatoos on Masakambing island still triggers questions because the location of Masakambing island is outside the Wallace line, which is not common to find families of parrots such as yellow-crested cockatoos.

### 1. Introduction

Bugis is one of the ethnicities that are living and spreading out in Indonesia. It is well known that the ethnic likes to wander. Zid & Sjaf (2009) stated that the Bugis ethnic or Buginese has spread throughout Indonesia and even foreign countries such as Singapore, Malaysia, and Australia as well since the seventeenth century. They are recognized for their ability in adapting to new environments. This is due to their three important abilities: (1) self-understanding and being talented to adjust oneself to different cultures and gradually assimilate; (2) being self-aware to avoid conflict; (3) the ability to respect and appreciate other parties (Desmita, 2014).

The existence of Buginese in one region can be identified from various aspects as distinctive characters. The values existing in society are one of the symbols of culture. Rahim (2011) claimed that the main values of Buginese culture are performed from their honesty (*lempu'*), intelligence (*amaccang*), appropriateness (*assitinajang*), persistence (*agettengeng*), effort (*reso*) and shame (*siri'*). In their socio-economic activities, they are also closely related to agriculture and trade (Rahim, 2011). The existence of Buginese outside the region as copra farmers were traced by Purba & Lisanti (2021) in Banyuasin Regency, South Sumatra Province, Indonesia. The Buginese is famous as an inter-island agricultural trader using the *phinisi*, *Lambo* and *benggo* ships.

Besides, Buginese culture is also reflected in the cultural identity attributed to the community such as house architecture, carvings, or other forms. The architecture of the Bugis house has the philosophy and function of the human body in a lying position as a means to provide protection, comfort for residents and the use of the house frame as a central pillar proportionally has the strength to withstand earthquakes, floods and strong winds. (Naing & Hadi, 2020). Musdaria (2018) studied the characteristics of house architecture in Buginese culture which is considered to have harmony between the house, the inhabitants, and the environment. Besides, the *phinisi* ship as a means of sea transportation is also associated with the Buginese culture in exploring Indonesian archipelago (Bandung, 2020). Their cultural identity, in addition, can also be identified through the presence of fauna in a region through the Traditional Ecological Knowledge (TEK) approach. The knowledge possessed by local people concerning to faunas is recognized with term of TEK (Traditional Ecological Knowledge). Berkes et al (2000) and Armstrong et al (2007) defined TEK as a collection of knowledge, practices and beliefs that develop through adaptive processes and are inherited from generation to generation through cultural transmission, the relationship between living things (including humans) with one and another to nature through experiences over thousands of years when they are interacting with nature. Studies on the existence of cultural community through TEK can be used to provide information on biodiversity, including species in which its populations are declining (Biró et al., 2014).

Fauna studies and its relation with culture in society have been started in 1960's. Culture dealing with the presence of faunas in a society can be used as a basis for adequate information (Viciano, 2021). Furthermore, Whiten (2011) claimed that faunas are suited as an epistemic of culture in a community. Epistemic is one of the branches of field of science to prove the truth produced by a science (Subaidah et al., 2019). The linkage of animals in identifying a particular ethnicity has been carried out by de Arruda et al (2018) in identifying ethnic groups in the Brazilian Amazon in relation to fish knowledge. Likewise, the identification of ethnic in Alaska has been tracked through the relationship of community with northern fur seals (*Callorhinus ursinus*) (Eldridge, 2016).

Masakambing Island is an island that is located in the Java Sea near to Sumenep Regency, East Java. It covers an area of 7.79 square kilometers and is administratively part of Masakambing Village, Masalembu District, Sumenep Regency, East Java Province. The people who inhabit this island are mostly dominated by Buginese,

besides Mandarese and Madurese as well (Ihsannudin et al., 2020). A small island with a multiethnic community is also found in Sabah, East Malaysia (Majid Cooke & Johari, 2019). Indeed, there are various causes of the emergence of multiethnic on an island. The emergence of a multiethnic society due to slavery is also found in the Republic of Bénin (Law, 2013).

On the other hand, the island has extraordinary resources of biodiversity. One of them is the yellow-crested cockatoo (*Cacactua sulphurea abotti*). This fauna is an endangered species in which the population is only 17 in their habitat (Nandika et al., 2013). Iucnredlist (2017) has categorized the yellow-crested cockatoo into critical or endangered categories. Similarly, according to Government Regulation Number 7/1999 concerning the Protection of Animals and Plants, the yellow-crested cockatoo has been conserved as a protected fauna and more than 221 animals as well as 73 other plant species. This study investigates to find out the history of the existence of the community in Masakambing Island and traces of Buginese culture through the existence of the yellow-crested cockatoo on Masakambing Island.

## 2. Method

This research was conducted with a qualitative approach by applying an ethnographic design. This method is appropriate since ethnography admits culture as a point of view of research in group of community (Sharma & Sarkar, 2019). Furthermore, the study was carried out on Masakambing Island, Masalembu District, Sumenep Regency. This location was designated purposively by considering that Masakambing Island is the habitat of the yellow-crested cockatoo species by way of traces of Buginese ethnic.

The data used are primary and secondary data. Primary data were obtained through on-site observations and open interviews with selected key informants who were considered capable in explaining research objectives, namely Mr. Saburi and Atong Saleng as local figure and the oldest figure in the Masakambing island. On the other hand, key informant involve Nandika as well as activists for the conservation of the yellow-crested cockatoo. While secondary data is acquired from village records, documentation, accurate scientific sources such as journals, regulations and others. Rinaldo & Guhin (2022) stated that ethnographic interview is helpful tool to access a different culture and being able to understand culture interaction.

## 3. Result and discussion

### • The history of Masakambing island

Masakambing Island is located in the territorial waters of the Java Sea which is geographically located 5°42' - 5°47' south latitude and 114°39' - 114°45' east longitude. The island can be reached through Tanjung Perak Port Surabaya or Kalianget Port, Sumenep Regency.

The voyage to the island uses pioneer ships that are requisites to transit at Masalembu island port. It takes 18 hours from Tanjung Perak port, Surabaya, and 16 hours from Kalianget port, Sumenep. There are two units pioneer ship serves regularly or every five days of each port. However, if there is only one ship serving passengers, it can be

ensured that the voyage will be once for ten days. The trip to Masalembu island port can be scheduled every day from Sumenep port by embarking motor sailing boat (KLM) which usually carries goods for the community.

In addition, the voyage from the port of Masalembu island to Masakambing island is continued with a small boat which is called a "taxi" by local people. Regular transportation serves regularly from Masalembu island to Masakambing from 01.00 to 02.00 PM. Meanwhile, returning from Masakambing Island to Masalembu is served from 07.00 to 08.00 AM. It takes around two hours from Masalembu port by "taxi". The ship berth at the port of Tanjung village or another place of Ketapang village, Masakambing island, depending on the sea water conditions that enable the ship to dock. Providing that the water recedes, the ship cannot dock and passengers and goods are transported using rafts to be pushed ashore.

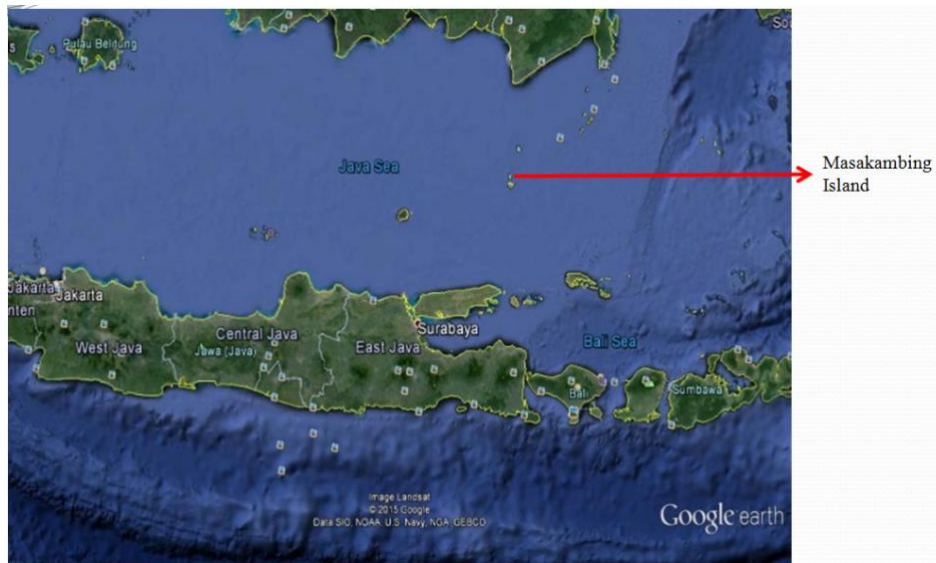


Figure 1. Map of Masakambing Island  
Source: GoogleEarth. 2022

Masakambing island is inhabited by 1,365 people who live in Ketapang village (48%) and Tanjung Village (52%). Most of their livelihood are farmers 40.6%, fishermen, and traders respectively 16%.

In the manuscript of the Masakambing island Village, the discovery of the island was initiated with a voyage of a figure named Karaeng Binuang, the brother of Karaeng Binansa who came from Goa, South Sulawesi accompanied by Karaeng Binuang's nephew, Baba Sa`ad or Baba Tinggi and his wife, Hj. Marwah, his nephew, H. Rasul and his wife, Hj. Nonang, and several other friends who also took a part in this group.

The voyage was started from Kalimantan to their hometown in Sulawesi. Yet, in the middle of the trip, their boat was hit by a storm causing fatal damage. The boat was upside and downside in the ocean and stranded on a small uninhabited island. The side of the island where they were beached was named *Tanjung Selamat* (located on the

east of Masakambing island). This location, further, is *Tanjung Selamat* Village. This group, additionally, stayed on the island while repairing the boat.

During that time, Karaeng Binuang tried to hike up to the mainland of the island. He was very surprised because he saw an awful flock of goats having clean white fur. They, strangely, only appear at certain times. That is why Karaeng Binuang gave the name of the island Masakambing island (Masa = Island and Kambing = a loaf goats that he saw).

Furthermore, Karaeng Binuang and his group stayed on this island and initiates to plant crops. Then, forests on the island was started to be cleared for farming and plantations. The origin of the commodities planted in the island were coconut and other plants such as corn.

After living on the coast for a certain time, Karaeng Binuang initiated to go back to Sulawesi, while his nephew Baba Sa'ad and his wife (Hj. Marwah) as well as H. Rasul and his wife Hj. Nonang still stayed on Masakambing island.

Until a moment, seamen from the Mandar tribe came and took part in opening the Masakambing island. One of the Mandarese who first cleared the land in Masakambing was Wa Hera, Wa Sappe, and Wa Marinna. After Masakambing island inhabited, many seamen from Buton, Sulawesi, Kalimantan and Madura stopovers to just take drinking water and supplies, and even some of them live there permanently.

A few months after Karaeng Binuang arrived in Sulawesi, Haji Mahmud or Wak Haji Ombe came to Masakambing island. He was a Makassarese who opened land firstly on the northern side of Masakambing island, which is now known as *Ketapang* Village. The name *Ketapang* is derived from an area in which many *ketapang* trees were growing at that time. However, some of them live for a short time on the Masakambing island because of the number of mosquitoes that were uncontrollable.

After Baba Saad returned to Sulawesi, he passed away while his wife Hj. Marwah went back to Masakambing island until she died on the island. Hj. Marwah's tomb is located in south of the *Tanjung Selamat* football yard. Finally, H. Rasul and his wife lived in Masakambing island to continue to what they had attained with his uncle and brothers during the time.

The history of Masakambing island can also be traced through the ancestors of the generations. According to the informant Mr. Saburi, Masakambing island was first discovered by Wak Haji Ombe around 1835. One of the descendants of Wak Haji Ombe was Haji Mamang who lived between 1915-1995. He has 5 descendants, namely Siti, H. Janang, Kahar, Idah (still alive) and Fendi. Other next descendant still today are Dedi (Masakambing), Erna (Malaysia), Ita (Malaysia) and Milah (Masakambing).

*"Wak Haji Ombe we know as the first person who came to Masakambing, apart from the existing fairy tales"* (Interview: Saburi, 2022).

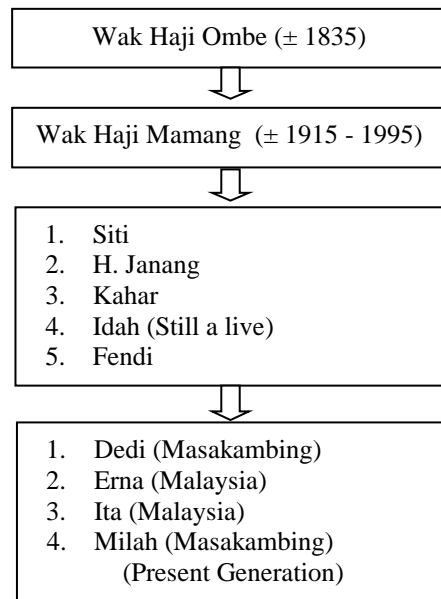


Figure 2. Family structure of occupants on Masakambing island based on Saburi's informantion  
Source: Primary Data, 2022

Furthermore, seamen from the Mandar tribe arrived and also took part in clearing land and planting crops on Masakambing island. In Japanese colonial era, Madurese arrived lately both from Raas, Sumenep, and from northern coast of Madura (Ketapang and Nepa, Sampang Regency). The Madurese, at first, worked for landlords consisting of Buginese and Mandarese people. Then gradually, they were able to buy land on Masakambing island.

Other informants, one of the oldest local residents in Ketapang village, Atok Saleng, said similar information. According to him, Baba Sa'ad was the first person who landed on Maskambing island, when he voyaged from Sulawesi to Malacca (Singapore) to trade. During the journey, the boat was damaged so that it swayed and was stranded on an island. Then, Baba Sa'd saw a lot of goats on this island, so the island was named Masakambing island.

After living for long time in Masakambing island, Baba Sa'ad returned to Sulawesi. He told about the discovery of an uninhabited island. Afterward, Baba Sa'ad returned to Masakambing Island, carrying coconut and corn seeds to be planted. Baba Sa'ad also invited his relatives and friends, one of whom was Datok, the father of the informant (Atok Saleng). The more friends and relatives that Baba Sa'ad invited enabled to open more agricultural land on the island. One year later, Atok Saleng's father returned to Sulawesi to take his family to Masakambing island to help clear the land. When he

came to the Island with his father in 1901, Atok Saleng' was puberty (around the age of 15).

*"I still remember when I was puberty period and my father brought coconut seeds from Sulawesi to be planted on this island"* (Interview: Atok Saleng, 2022).

Atok Saleng is about 125 years old now. At what time AtokSaleng arrived on Masakambing Island in 1901, he was 15 years old, it is estimated that Atok Saleng had inhabited Masakambing island for about 117 years. Hence, it can be assumed that the discovery of Masakambing island by Baba Sa'adwas in the 1890s.



Picture 3. Atok Saleng, informant  
Source : Primary Data, 2022

According to Atok Saleng, the Mandarese who came lately were initiated by Wak Bakaraeng. Ethnicity binding as Sulawesi people encouraged these two ethnic groups to work together in opening land of Masakambing Island. Meanwhile, Madurese arrived on this island by becoming agricultural worker during the Japanese colonial era. Even, laborers employed by Atok Saleng's father also came from Madura.

The information about the history of people who arrived to Masakambing island is originated from the Buginese in the 1800s is alike. There is a name that is always mentioned from several sources, namely Baba Sa'ad who is believed to be the first generation of the island discoverer. Then, it is followed by Mandarese of West Sulawesi. The Madurese arrived late in the 1940s, as Ihsannudin et al. (2020) found that the Madurese who came to the Masalembu islands, including the inhabitants of Masakambing island, departed from the ports of Nepa and Ketapang on the north coast of Madura and from the Sumenep.

Other studies of scientific documents that can also be reference are the manuscript by Oberholser (1912) in a US National Museum in proceeding article on ornithological travel records of the yellow-crested cockatoo by Dr. W, L Abbot in 1907. As a cluster of the Masalembu Islands, Oberholser's article can provide an overview on Masakambing island. Dr. W.L Abbot visited an island called Big Solombo Island or Big Solombo or Big Masalombo on December 3 to 6, 1907. The document showed that the island is located about 90 miles south of the island of Borneo (Kalimantan) or 145 miles north of the nearest point easternmost island of Java and about 120 miles east of Bawean Island.

At that time Dr. W.L Abbot has found residents who sorted out farming activities. The forests on the island had also partially encroached. This means that before 1907 (when Abbott arrived) the Masalembu islands cluster was already inhabited and there had been farming activities.

The finding that the discoverer of Masakambing island was Bugenese makes sense. This is believed that they are known as prodigious sailors and like to wander. They are one of the Austronesian families having distinctive characteristics of an ethnic group adoring to wander (Ridha, 2018). Their migration reason is not only due to economic motives but also for reasons of getting away from unsatisfactory social conditions, avoiding conflict or war, and the loss of independence or lawlessness (Bandung, 2020). This statement was strengthened by Zid & Sjaf (2009) who stated that in the 19th century (1800s) or the colonial era, the Dutch East Indies attempted to strengthen its political economy by means of a military expedition to conquer the kingdom in South Sulawesi.

- **Traces of the Bugis Ethnicity through the yellow-crested Cockatoo**

The yellow-crested cockatoo (*Cacatua sulphurea abbotti/ C.s abbotti*) is a sub-species of the yellow-crested cockatoo that only lives on Masakambing island. The scientific study was primary conducted by a zoologists especially birds, Dr. W.L Abbott (ornithology). In his expedition on the island called Big Solombo, he collected 33 bird specimens. These specimens represent ten species and eight of them are described as new species. One of his findings was that birds categorized as *Cacatoa* family have similar colors to birds found on Timoriland.

Recently, these faunas are protected because their populations are threatened to be extinction. The International Union for Conservation of Nature (IUCN has categorized it as critically endangered. At the national level, the protection is restricted in Law Act Number 5/1990 on Conservation of Biological Natural Resources and Their Ecosystems, Government Regulation 7/1999 on Preservation of Plant and Animal Species, Decree of the Minister of Forestry No. 350 /KPTS-11/1997 and Minister of Forestry Decree No. 522/KPTS-11/1997. At the local level, there are two protective regulations, namely the Sumenep District Regulation No. 5/1995 and the Masakambing Village Regulation No. 1/2009 concerning the Protection of Cockatoo.

These non-migrant faunas, morphologically, has a body length of about 33-40 cm, yellow crest, dominated white fur, faint yellow cheeks, and bright yellow under the tail and wings. The eye circles are not covered with milky white fur. The beak is gray with dark legs. Gender can be identified by the color of their eyes cross, in which the male is black and the female is reddish brown.

The local community of Masakambing island named the yellow-crested cockatoo as "Beka". This name comes from the Bugenese meaning parrot. It is understandable for Bugenese as the local people has a heredity history of their relationship with this bird species.





Figure 3. Yellow crested cockatoo in Masakambing Island  
Source: Primary Data, 2022

The Buginese is recognized as the pioneer inhabitant community in Masakambing island that is close with the existence of cockatoo. It is known that the yellow-crested cockatoo is a typical endemic species of Indonesia which is divided into 6 sub-species. Sub-species *C.s sulphurea* on Sulawesi Island and its satellite islands, sub-species *C.s citrinocristata* on Sumba Island, sub-species *C.s parvula* in Nusa Penida Bali and East Nusa Tenggara, *C.s djampeana* in South Sulawesi, Tanahdjampea Island and Kalao Island. *C.s occidentalis* spread over Nusa Penida, Komodo Island and Timor Leste (Nandika et al., 2013). This means that the Buginese are familiar with the yellow-crested cockatoo with at least two sub-species, namely *C.s sulphurea* and *C.S djampea*. So, it makes reasonable that the local name for the yellow-crested cockatoo uses the word Beka' which comes from Bugis language.

Atok Saleng as the informant said that the yellow-crested cockatoo had existed since Masakambing island was discovered by Buginese sailors in the 1890s. He got the story that when his father arrived on Masakambing Island there were already many Beka.

*"When my father came to Masakambing, there were many Beka, and existed in all over the island. Now it's only found in Ketapang."* (Interview: Atok Saleng, 2021).

An outline to this type of bird from Atok Saleng's father's is believable since his father is from Buginese (Sulawesi) who understood this bird species before. This story discards the understanding that the yellow-crested cockatoo on Masakambing island is migrated birds from Masalembu Island. W.L Abbott's scientific study visited Masalembu island which he called Solombo Island or Big Solombo Island or Big Masalembu in 1907. But now the existence of a yellow-crested cockatoo on Masalembu Island is absolutely not found.

*"In the past, there were many Beka on Masalembu Island, but when there was oil and gas drilling development many were shot and arrested. It's extinct now."* (Interview: Satriya, 2021).

This result shows that the endemic habitat of the yellow-crested cockatoo sub-species *abbotti* is only found on Masalembu island and Masakambing island. Meanwhile, on

the Karamian Island as part of Masalembu archipelago, no yellow-crested cockatoo was found. However, the population of the yellow-crested cockatoo on Masalembu island is now extinct. Accordingly, the yellow-crested cockatoo of the abbotti sub-species is currently only found on Masakambing Island.

*The result of the research shows that Karamian community expresses for 30 recently, they do not fins Beka. (Interview: Nandika, 2022).*

The scientific study of the existence of the yellow-crested cockatoo on Masakambing island is essentially still a puzzle. The yellow-crested cockatoo as a group of parrot species are generally only found in the territory of Indonesia which is comprised in the Wallace line. In short, Wallace's line is an area used to describe two deep straits that are formed from the mainland of Asia and Australia or some are composed of the Sunda and Sahul shelves. Wallace's line illustrates a clear difference between flora and fauna inside and outside Wallace's line. While Masalembu Island and Masakambing Island themselves are areas outside the Wallace line. The allegation that the yellow-crested cockatoo on Masakambing island was carried by people is indisputable because it has different characteristics from other sub-species.



Figure 4. Wallace line  
Source: [www.zonasoal.com](http://www.zonasoal.com)

The naming of the yellow-crested cockatoo became a TEK when the name "Beka" emerged with Buginese community who had long interacted with these faunas. Armstrong et al. (2007) claimed that TEK did not appear suddenly, but through experience gained over thousands of years when the community interact with nature. Fauna Naming by the local community is also conducted by people in Serbs who are created on their size, eating habits, and character (Halupka-Rešetar & Radić, 2003). In other applications, the concept of Bugis culture is proven to support students' abilities in developing collaborative skills, critical thinking and problem solving (Asfar et al., 2021).

The ethnic composition inhabiting the Masakambing island consists of Madurese (60%), Buginese (26.9%), Mandar (3.1%), Mixed Madurese - Bugines/Mandar (6.3%), Javanese (1.3%), Sundanese (0.6%) and others (1.9%). This composition is dynamic due to marriage and migration.. The daily language of Masakambing Island community is the Madurese language. Sometimes mixed with Bugis and Mandar languages.

However, in naming the yellow-crested cockatoo, the Madurese language does not have vocabulary. The Madurese ethnicity on their home land (Madura Island) has no connection with this animal. The distribution of this animal is very limited and does not mention in Madura island (Harris et al., 2015; Reuleaux et al., 2022). This implies that the Madurese ethnicity did not have a history of interaction with these animals before. Tracing ethnic migrations can be conducted by studying various heritages including biodiversity heritage, such as conducted in the Duerro River region between Spain and Portugal. (Hearn, 2021). In the case of Masakambing Island community, it is proven that the Bugis ethnicity is part of the local community and has even become a pioneer of the inhabitants of this island.

#### 4. Conclusion

The Buginese ethnicity is the origin ethnic who inhabited Masakambing island. This is obtained from village history documents, and informant descriptions which are strengthened by existing scientific texts. Traces of Buginese culture can also be found through the yellow-crested cockatoo, sub-species *abbotti*, as endemic faunas of the island. The local name "Beka" is Buginese language that means cockatoo. The Buginese people in Sulawesi are familiar with these faunas with the yellow-crested cockatoo sub-species *Sulphurea* and *djampea* that live in Sulawesi Island. Even though Madura language is daily language of the local community, Madura language does not have the vocabulary to describe the yellow-crested cockatoo. Further studies are needed concerning the presence of a yellow-crested cockatoo on Masakambing island. The faunas belong to the parrot family that normally exists inside the Wallace line, while Masakambing island is outside the Wallace line.

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#### References

- Armstrong, M., Kimmerer, R. W., & Vergun, J. (2007). Education and research opportunities for traditional ecological knowledge. *Frontiers in Ecology and the Environment*, 5(4), W12-W14. [https://doi.org/10.1890/1540-9295\(2007\)5\[w12:EAROFT\]2.0.CO;2](https://doi.org/10.1890/1540-9295(2007)5[w12:EAROFT]2.0.CO;2)
- Asfar, A. M. I. T., Asfar, A. M. I. A., & Nurannisa, A. (2021). Integration of Local Traditions Bugis-Makassarese: Learning Strategies to Improve Mathematical Communication Skills. *IOP Conference Series: Earth and Environmental Science*, 1808(1). <https://doi.org/10.1088/1742-6596/1808/1/012064>
- Bandung, T. (2020). Budaya Bugis Dan Persebarannya Dalam Perspektif Antropologi Budaya. *Lensa Budaya: Jurnal Ilmiah Ilmu-Ilmu Budaya*, 15(1), 27-36.
- Berkes, F., Colding, J., & Folke, C. (2000). Rediscovery of Traditional Ecological Knowledge as Adaptive Management. *Ecological Applications*, 10(5), 1251-1262.

- <https://doi.org/10.2307/2641280>
- Biró, É., Babai, D., Bódis, J., & Molnár, Z. (2014). Lack of knowledge or loss of knowledge? Traditional ecological knowledge of population dynamics of threatened plant species in East-Central Europe. *Journal for Nature Conservation*, 22(4), 318–325. <https://doi.org/10.1016/j.jnc.2014.02.006>
- de Arruda, J. C., da Silva, C. J., Sander, N. L., & Pulido, M. T. (2018). Traditional ecological knowledge of fish fauna in quilombolas on the Alto Guaporé, Mato Grosso, Southern Amazonia, Brazil. *Boletim Do Museu Paraense Emilio Goeldi: Ciências Humanas*, 13(2), 315–329. <https://doi.org/10.1590/1981.81222018000200004>
- Desmita. (2014). *Psikologi Perkembangan Peserta Didik*. Remaja Rosdakarya.
- Eldridge, K. A. (2016). An analysis of archaeofauna recovered from a Russian period camp on St. Paul Island, Pribilof Islands, Alaska. *Arctic Anthropology*, 53(2), 33–51. <https://doi.org/10.3368/aa.53.2.33>
- Halupka-Rešetar, S., & Radić, B. (2003). Animal Names Used in Addressing People in Serbian. *Journal of Pragmatics*, 35(12), 1891–1902. [https://doi.org/10.1016/S0378-2166\(03\)00052-3](https://doi.org/10.1016/S0378-2166(03)00052-3)
- Harris, J. B. C., Green, J. M. H., Prawiradilaga, D. M., Giam, X., Giyanto, Hikmatullah, D., Putra, C. A., & Wilcove, D. S. (2015). Using market data and expert opinion to identify overexploited species in the wild bird trade. *Biological Conservation*, 187, 51–60. <https://doi.org/10.1016/j.biocon.2015.04.009>
- Hearn, K. P. (2021). Mapping the past: Using ethnography and local spatial knowledge to characterize the Duero River borderlands landscape. *Journal of Rural Studies*, 82(July 2020), 37–53. <https://doi.org/10.1016/j.jrurstud.2021.01.024>
- Ihsannudin, I., Hidayat, K., Sukesu, K., & Yuliati, Y. (2020). Perception of the local community toward the yellow-crested cockatoo (*Cacatua sulphurea abbotti*), a critically endangered species in Masakambing Island, Indonesia. *Malaysian Journal of Society and Space*, 16(4), 1–14. <https://doi.org/10.17576/geo-2020-1604-01>
- Iucnredlist. (2017). *Cacatua Sulphurea*. [www.Iucnredlist.Org](http://www.Iucnredlist.Org).
- Law, R. (2013). Ouidah as a Multiethnic Community. In J. Cañizares-Esguerra, M. D. Childs, & J. Sidbury (Eds.), *The Black Urban Atlantic in the Age of the Slave Trad* (pp. 42–62). niversity of Pennsylvania Press.
- Majid Cooke, F., & Johari, S. (2019). Positioning of Murut and Bajau identities in state forest reserves and marine parks in Sabah, East Malaysia. *Journal of Southeast Asian Studies*, 50(1), 129–149. <https://doi.org/10.1017/S0022463419000171>
- Musdaria, M. (2018). *Prinsip-Prinsip Rumah Tradisional Bugis Dan Aplikasinya Terhadap Rumah Tanggap Banjir Di Makassar*. A092-A100. <https://doi.org/10.32315/sem.3.a092>
- Naing, N., & Hadi, K. (2020). Vernacular architecture of buginese: The concept of local-wisdom in constructing buildings based on human anatomy. *International Review for Spatial Planning and Sustainable Development*, 8(3), 1–15. [https://doi.org/10.14246/irspsda.8.3\\_1](https://doi.org/10.14246/irspsda.8.3_1)
- Nandika, D., Agustina, D., Metz, S., & Zimmer, B. (2013). *Kakatua Langka Abbotti dan Kepulauan Masalembu*. Konservasi Kakatua Indonesia – The Indonesian Parrot Project.
- Oberholser, H. C. (1912). Birds Collected by Dr. W. Abbott on Various Island in The Java Sea. *Proc U.S Nst. Mus*, 42(1912), 533.
- Purba, Y., & Lisanti. (2021). Copra processing issue of migrant farmers in tidal land of South Sumatra. In S. T, S. A, A. M, P. S.M, C. D, & R. R. (Eds.), *1st International*

*Conference on Agriculture, Natural Resources, and Rural Development, ICANaRD 2021*. IOP Publishing Ltd.

- Rahim, A. R. (2011). *Nilai-Nilai Utama Kebudayaan Bugis*. Penerbit Ombak.
- Reuleaux, A., Siregar, B. A., Collar, N. J., Mardiasuti, A., & Marsden, S. J. (2022). Productivity constraints on Citron-crested Cockatoos in a rich community of large hole-nesting birds. *Avian Research*, 13(March), 100015. <https://doi.org/10.1016/j.avrs.2022.100015>
- Ridha, A. A. (2018). Task Commitment pada Mahasiswa Suku Bugis yang Merantau. *Jurnal Psikologi*, 45(1), 66–76. <https://doi.org/10.22146/jpsi.31094>
- Rinaldo, R., & Guhin, J. (2022). How and Why Interviews Work: Ethnographic Interviews and Meso-level Public Culture. *Sociological Methods and Research*, 51(1), 34–67. <https://doi.org/10.1177/0049124119882471>
- Sharma, H. L., & Sarkar, C. (2019). *Ethnography research: an overview*. July.
- Subaidah, T., Muharrami, L. K., Rosidi, I., & Ahied, M. (2019). Analisis Kemampuan Literasi Sains Pada Aspek Konteks Dan Knowledge Menggunakan Cooperative Proplem Solving (Cps) Dengan Strategi Heuristik. *Natural Science Education Research*, 2(2), 113–122. <https://doi.org/10.21107/nser.v2i2.6238>
- Viciana, H. (2021). Animal culture: But of which kind? *Studies in History and Philosophy of Science*, 90(November), 208–218. <https://doi.org/10.1016/j.shpsa.2021.10.012>
- Whiten, A. (2011). The scope of culture in chimpanzees, humans and ancestral apes. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 366(1567), 997–1007. <https://doi.org/10.1098/rstb.2010.0334>
- Zid, M., & Sjaf, S. (2009). Sejarah Perkembangan Desa Bugis-Makassar Sulawesi Selatan. *Jurnal Sejarah Lontar*, 6(2), 38–53.