PART II

Examples of Primitive and Aboriginal Dogs



INTRODUCTION

THE DINGOES

The New Guinea and Australian dingoes are the only two dog populations today that can be considered truly wild. Each subspecies is the top predator in those two land ecosystems and is a self-perpetuating population (they reproduce and survive in the wild). If the dog is considered a valid species, after thousands of years of geographic isolation from other dogs during which the dingoes evolved unique traits, they meet the definition of a biological subspecies. All other dogs are domesticated, and even if free-ranging, survive mainly as scavengers around humans. Because the dingoes have at least 4,000 years less association with people than modern domesticated dogs, they are important remnants of the original dog

THE ABORIGINAL DOGS

Aboriginal dogs, as defined in this book, are:

- A class of domestic dogs that emerged as an ecotype within a specific ecological niche;
- Largely the result of environmental adaptation, mostly under conditions of natural selection but influenced by human preferences and interference;
- Fit the requirements of a specific human society living in a particular ecosystem.

Johan and Edith Gallant¹

Aboriginal dogs:

- Have evolved by natural selection under conditions of free life and close interactions with people;
- are a unique piece of nature, time bound and place bound, most similar to zoological subspecies;
- are historically associated with ethnic groups and cultures;
- are one of the oldest and most natural dogs in existence.

Vladimir Beregovoy, PhD²

In many places in Africa, the Middle East, Arabia, India, South East Asia (including far south east China), and the Pacific Island nations, there are ancient races of dog that have, since dogs and humans first connected, led their own independent lives side-by-



FIGURE 1.1. A captive Australian (rear) and New Guinea dingo illustrate the typical size difference of these two subspecies.

side with people. While some are owned, and a small minority serve humans as flock guards, household warning systems, or hunting aids and therefore are purposefully fed, as explained in Chapter 5 most make their own living. They keep the villages cleaned up of garbage and feces, a valuable service where there is no waste collection or sanitary facilities. Their survival is just as tough as if they were wild, maybe more so as they deal with human predators (surplus dog killing in developing countries with few resources, often by gruesome means such as poisoning or clubbing) and motorized vehicles, in addition to poisonous snakes, weather extremes, food fluctuations, and predators in the areas just outside the villages. For example, the diet of 21 leopards that live in Sanjay Gandhi National Park adjacent to Mumbai, India, is about 60% dog.³

These aboriginal dogs are not "juvenilized wolves" but intelligent, problemsolving, perfectly adapted commensal canids. They thrive and reproduce on the most meager, protein deficient diets. Their bodies are resistant to the local parasites and only become overwhelmed by mange or worms when stressed by other factors such as poor nutrition. Natural selection quickly eliminates individuals with orthopedic and metabolic problems. If brought into homes as puppies they grow into loyal, generally long-lived companions. In other words, except for some highly specialized types of work, they are actually the ideal dogs.

Like dingoes, aboriginal dogs are not, however, the ideal pet for most people in developed, industrialized areas precisely because they have extremely high intelligence and independent temperaments. Today most people are accustomed to dogs that have been specifically selected to be companions or at-command working dogs. These modern breed and mixed breed dogs are in general much easier to keep confined and less emotionally reactive (sensitive) than aboriginal dogs. Even so, there has always been a minority who are willing to adjust their lives to accommodate aboriginal dog companions, precisely because they appreciate the intelligence and independent attitude of these ancient races. For these people, other dogs, while interesting and admired, are "too domesticated." Modern derived dogs are like children who depend on us for their lives. Aboriginal dogs are like friends with whom we have a mutual affection and devotion.

There are some kennel club registered breeds that were developed from aboriginal landraces. In general they still retain the native intelligence and independent attitude of the village dogs although for some breeds the reactive temperament has been toned down, and their physical appearance changed from the free-ranging population to varying degrees (what the breeders term "improving" the breed, by selecting for instance for longer hair, greater or lesser body size, specific colors). Usually these breeds were started by a very small sample of the original landrace chosen by nonnatives according to their personal aesthetic preferences and then taken out of their natural environments as founders for "pure breeds." Some examples are: the Basenji, Samoyed, Siberian husky, Finnish Spitz, Russo-European Laika, Karelian Bear Dog, the traditional gazehounds selected from different landrace breeds (e.g. Afghan hounds,



FIGURE 1.2. This is an area outside an Indian city constructed for the natural disposal of animal carcasses. The free-ranging dogs, which appear to be Indog mixes, clean the bones, which are sold to become agricultural bone meal.



FIGURE 1.3. This is an aboriginal Thai dog mating with a mixed breed dog. Both the pure Australian dingo and aboriginal landraces are slowly being genetically compromised by imported modern dogs.

sloughi, saluqui, Azawakh, Indian caravan hounds, Portuguese podencos), the German spitz breeds, Norrbottenspets, Swedish vallhund, Norwegian buhund, and Mexican xoloitzcuintli/Chinese crested.

Due to the unavoidable inbreeding in closed gene pools (no specimens from nonkennel club registered parents can be admitted to most stud books after the founders are entered), loss of genetic diversity due to selection of only a few individuals of each generation to breed, and the unfortunate human tendency to select for exaggerated traits (the proverbial "if a little is good, more is better" syndrome) before health and longevity, many pure breeds are experiencing high rates of health and reproductive problems and unnaturally short life spans.⁴ Because they recently originated from a population under natural selection, most of the breeds derived from aboriginal landraces have excellent health, with a few exceptions due to disease caused by mutated genes that are concentrated in closed gene pools. If a breed gets into a genetic dead end hopefully the fanciers will insist on opening the stud book to incorporate new landrace specimens, as they did for the Basenji, do for the Canaan dog, and are in process of doing for the saluqui.⁵

The free-ranging, free-breeding aboriginal dogs of the world are a reservoir of genetic diversity for the species *Canis familiaris*, waiting to be tapped as needed.⁶ At least they are until the host cultures change and disallow free-ranging dogs, or they are genetically swamped by cross breeding with imported modern domestic dogs. Today,

most free-ranging dogs within several miles of any city in areas that traditionally had aboriginal dogs are mixed. But in more rural areas there are still pockets of pure ancient line dogs. Some of them are pictured in the following accounts written by people working to conserve them. The album illustrates additional landraces and breeds created from landraces. With current rates of human population growth, accelerating expansion of developing economies, and improved transportation, it is only a matter of time before these precious remnants of original dogs are lost. And that time is short.

The individual entries for the dingoes and aboriginal dogs were composed by experts. Within a basic format and word limit, they chose what to include.

NOTES

- 1. Gallant, J., 2002.
- 2. Beregovoy, V., 2001.
- 3. Edgaonkar, A. and R. Chellam, 2002.
- 4. Calboli, F. C., et al.; Leroy, G., 2011.
- 5. https://www.basenji.org/african/project.htm; http://www.desertbred.org/
- 6. Boyko, A. R., et al., 2009; Savolainen, P., et al., 2002.

THE NEW GUINEA DINGO

(Canis familiaris hallstromi)

BY JANICE KOLER-MATZNICK



FIGURE 1. This photo was taken at the Tari Gap pass, Southern Highlands, Papua New Guinea in about 1995. The photographer asked the boy, who was passing by with his family, if he could take his picture, but failed to ask what tribe he belonged to. This appears to be a pure New Guinea dingo and may have been caught in the wild as a puppy.

New Guinea, located just north of Australia, is the second largest island in the world. It has rugged mountain ranges tall enough to have permanent glaciers. The first non-natives, who landed in a plane in the central valley, made it to the interior only in 1910. The first true expeditions started about 1938. Many remote areas have never been explored by non-natives. The mountains are home to the New Guinea dingo (NGD), also called the New Guinea singing dog, a named given for its chorus howl. The NGD chorus howl is different from other canids' communal howls because they are not merely all howling at the same time, but appear to be actually coordinating their howls, counterpointing each other, and creating what are known in human singing as "overtones" or "ringing chords" in which voices combine creating an added note.

Like the Australian dingo, the NGD is an ancient evolutionary line of early dog and is the top land predator in New Guinea. After its introduction the NGD has been evolving under only natural

selection and can be considered a true subspecies, not a "breed." Almost all we know about NGDs has come from the study and observation of captives. There are perhaps



FIGURE 2. The Mt. Giluwe peaks in Papua New Guinea, one of the locations still reporting wild New Guinea dingoes.

300 captive NGDs today, all descended from a few brought out of Papua New Guinea (PNG) in 1955 and West Papua in the 1970s. Almost all of the captives are in North America, although they used to be kept in many Australian and European zoos, and at the London Zoo.

Extremely little is known about the wild population, except that there are still wild NGDs in some remote places. We do know that the NGD is the top land predator of New Guinea and that its prey includes cuscus (an opossum-type marsupial), echidnas, and birds. They use natural rock and root formations as resting dens and may be seasonally migratory within their territory. Always reported to be extremely shy of humans, they are difficult to observe for more than a few seconds as they run away.

GEOGRAPHIC RANGE

NGDs have been sighted from 6,000 to 11,000 feet (2,000–4,700 m) altitude in the New Guinea mountains. Their range includes cloud forest, sub-alpine, and alpine habitats.

PHYSICAL DESCRIPTION

Captive NGDs are from 16 - 19 in. (40 - 48 cm) tall at the shoulder and 20 - 30 lbs. (9 - 13 kg). The coat is double, with seasonally thick underfur and a coarse dirt and water shedding outer coat, which is longer on the neck and the rear of the hind legs. The



FIGURE 3. The original pair (female barely visible on the left) of NGDs brought out of Papua New Guinea in 1955, on the boat going to Australia where they were displayed at the Taronga Zoo.

tail is carried in an upward curve and has a long fluffy brush on the underside that is a lighter color (cream or pale tan) than the rest of the coat. Two colors are known from the few sightings, the two photos of wild NGDs available, and the captive population: red sable (golden tan to fox red with some dark banded hairs on the back, top of the tail, back of the ears) or black and tan (main body is black with tan on the sides of the face, the legs and the underside of the tail). Almost all NGDs have a white tail tip and a spot or stripe of white under the chin. Many also have "Irish" white markings on the face, neck, feet, and legs. The wild population may have a broader range of color variation but their size is probably within the captive range.

BREEDING SEASON

Captive NGDs have one annual breeding season starting in August. Although reports of wild pups are rare, the approximate ages of those reported corresponds to this seasonal cycle. One of the most unique characteristics of NGDs, determined from many years of records on multiple females and by hormone assays, is that 30% of the females that do not get pregnant on the first cycle come in again into a full estrus about three months after the first ends. Then, about 10% of those females with second cycles who do not get pregnant come in for a third. No other canid has repeated estrus periods within one annual breeding season.



FIGURE 4. The only photo to date of a live wild NGD. This black and tan specimen was seen by mammologist Tim Flannery during an expedition to Dokfuma in the Star Mountains in the 1980s. The photo first appeared in his book The Mammals of New Guinea. Because the original was lost, this was scanned from that book.

CULTURAL ASSOCIATION

The NGD has, as far as is known, never been kept merely as a "pet" by the indigenous people. The wild NGDs reportedly avoid human habitation and never voluntarily become scavengers around villages. Before domesticated dogs became readily available, wild pups were captured and raised by a specific male hunter in the men's longhouse to become hunting aids. Reportedly, only one or two males were kept in each village group. While some lowland tribes that have been influenced by Austronesian cultural habits eat dog, most of the New Guinea Highlanders do not.

There is a rich cultural mythology about the wild NGDs, which locals clearly distinguish



FIGURE 5. A 12 week old captive male New Guinea dingo puppy. NGDs grow very rapidly their first four months and lose the loose skin. from domesticated dogs. Some "elder stories" relate how the wild dog brought fire, or language, and even that the people originated through the mating of wild dog males with human females. These same myth themes are present in many aboriginal cultures around the world. This may be an indication the basic stories were developed before modern humans spread around the globe. How else can one explain the 'dog brought fire' myth being present in Africa and Papua New Guinea? One interesting Papuan myth is that the spirits of dead people inhabit the wild dogs, which are therefore considered sacred and taboo.

THE FUTURE

The first ever field studies of wild NGDs are being planned. Two sites, Mt. Wilhelm, the tallest mountain in Papua New Guinea, and Mt. Giluwe (pictured above in Figure 2), the second tallest mountain, will be surveyed for the wild NGDs. The goal is to learn basic information about the wild population and to determine how NGD predation may be affecting the prey species, especially the endangered echidnas and rare species of cuscus.

For more information: http://newguinea-singing-dog-conservation.org/