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## DOGS OF THE BAHAMAS AND CARIBBEAN: EVIDENCE FROM COLUMBUS'S *DIARIO*, HISTORICAL DOCUMENTS, AND ARCHAEOLOGY

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### ABSTRACT

Several types of domestic dog (*Canis familiaris*) were present in the Bahamas and Circum-Caribbean in pre-Columbian and early historic times. Pre-Columbian peoples from South America carried their cultures and their dogs with them as they migrated into the Lesser and Greater Antilles and the Bahamas Archipelago. Dogs were one of several pre-Columbian animals introduced into the Circum-Caribbean and Bahamas and must have been transported from the mainland to the islands with humans in their canoes. Columbus reported two types of dogs in the Bahamas: larger mastiff-type dogs (Sp. *mastines*) and smaller, terrier-type dogs (Sp. *branchetes*). He also encountered “dogs that never barked” on the north coast of Cuba. Barklessness in Native American dogs was a widespread trait reaching from northern South America, Central America, the Caribbean, Mexico, up the Atlantic coast of North America, to the Great Lakes, and westward to the Northwest Coast culture area. It is still unclear whether barklessness is due to behavioral or genetic causes. Skeletal remains of prehistoric dogs in the Circum-Caribbean appear to represent a geographically widespread, medium-sized dog. Dogs of a similar size are reported from mainland Colombia, Panama, Honduras, Guatemala, and Florida. Images of prehistoric dogs appear in rock paintings, petroglyphs, woodcarvings (e.g., *duhos* or ceremonial seats), shell, stone, gold, and pottery across the Circum-Caribbean region. There also appears to have been a prehistoric and early historic period tradition of trading dog teeth for manufacturing dog tooth necklaces, aprons (loin-

cloths), and other jewelry. Long-distance trading of dogs, from northern South America, Central America, and the Lesser and Greater Antilles, has also been reported. The dog clearly played a major role in Circum-Caribbean cultures, including use as a hunter, companion, status symbol, guardian, trade object, food item, and a sacrificial ceremonial offering sometimes accompanying human burials. The four-legged dog spirit of the Taíno, OpiyéI-Guaobirán, was said to have guarded the route to the land of the dead, Coaybay.

### INTRODUCTION

#### Dogs of the Americas

Dogs in the Americas included as many as 13 different varieties of canines in the area north of Mexico (Allen 1920, Pferd 1987), most common of which was a medium-sized, generalized dog, many of which were recorded as barkless. Mummified dogs that have been found in the American Southwest and Peru with coats preserved indicate that these dogs were piebald white and brown, white and black, or tricolored (Caselman 2008). In Mexico, there were at least four different varieties including the *itzcuintli* (common dog), *xoloitzcuintli* (Mexican hairless dog), *techichi* or *tlalchichi* (“mat [floor] dog”), and the short nosed dog (Valadez 2000). Further to the south, in Peru, there were at least three different types of dog including a “shepherd-like” dog, a “dachshund-like” dog, and a “bulldog” type dog (Gallardo 1965). There were also medium-sized dogs with long snouts and short, spotted coats, and, commonly, upwardly curled tails (Brothwell

1979, Haag 1948, Wing 1989). For the Peruvian area, a small dog with a short snout (sometimes having short bowed legs) is recorded as being less common (Wing 1984, 1989). As in Mexico, Peru had its own variety of hairless dog (the Peruvian hairless) (Weiss 1970). In other regions of South America, the Spanish recorded “large and small dogs like ours, that they much esteem” (Oviedo y Valdez 1944, speaking of the mid-lower Paraná River region), a medium-sized, medium-headed dog from the Southern Cone (Acosta et al. 2011), and “small dogs, raised in houses, which are mute and do not bark” (Oviedo y Valdez 1944, speaking of the La Plata River Basin).

#### Dogs of the Intermediate and Circum-Caribbean Areas, and the Bahamas

Pre-columbian dogs in the Intermediate Area (the archaeological region between Mesoamerica and the Central Andes, including Central America and parts of Venezuela, Colombia, and Ecuador) and the Circum-Caribbean (the area of the Caribbean Basin proper, sometimes including the Bahamian Archipelago) have been documented from the archaeological record as early as ca. 2800 B.C. in a Valdivia III context at Real Alto, Ecuador (Marcos 1988). Other prehistoric dog remains have also been recovered along the north coast of Colombia (Angulo Valdes 1981, Ardila 1983).

Domesticated canines have been present in the Caribbean and Bahamas region since at least the Saladoid period (ca. 500 B.C.-A.D. 500/600) and are found throughout the Lesser and Greater Antilles. Several types of domestic dogs were brought to the Caribbean: larger sized mastiff-type dogs (called in Columbus’s *Diario*, “*mastines*”) and smaller, terrier-type dogs Columbus called “*branchetes*” (to be read *blanchete* from Fr. [*barbet*] *blanc*, “small white dog”) (Kudrati 2009 citing Oudin 1607). Columbus also recorded “dogs that never barked” (Columbus 1989 [1492]), today sometimes classified with other “barkless” dogs including the Basenji of Africa and the New Guinea Singing dog of Melanesia. These pre-Columbian dogs influenced the cultures of the Circum-Caribbean because they were geo-

graphically widespread and played numerous important roles, to greater or lesser degrees, including companion animal, food source, sentry, hunter, scavenger, trade item, and sacrificial offering, to name a few.

#### DOGS OF THE CARIBBEAN

The appearance of dogs in the Caribbean, specifically in the Lesser Antilles and Bahamas regions, can be dated back to the Saladoid period around 1-200 A.D (Hofman et al. 2011), perhaps a little earlier. The presence of the domesticated dog (*Canis familiaris*) is due to transport by pre-Columbian peoples during their migration(s) from the mainland (e.g., northern South America near the mouth of the Orinoco) to the Lesser Antilles, Greater Antilles, and eventually to the Bahamian Archipelago. These migrations from northern South America were made possible by the use of dugout canoes, some of which were recorded to carry as many as 45-50 persons (Columbus 1989 [1492]). These canoes were used to transport people (and their belongings, including pottery), plants, and animals such as dogs, agoutis, armadillos, guineas pigs, hutias, opossums and peccaries (Giovas et al. 2011). It is also apparent that dogs were being traded around the Caribbean in regional and long distance trade (Hofman et al. 2011, Laffoon et al. 2013). Through bone strontium analyses of teeth from dog tooth necklaces found on multiple islands, the hypothesis of dogs being traded in the Circum-Caribbean is supported by the fact that at least some dogs (as indicated by their teeth) found on the island of Guadeloupe have been sourced to other Lesser Antillean islands (Laffoon et al. 2013).

#### Columbus’s Descriptions of Bahamian and Cuban Dogs and the Issue of Barklessness

##### Columbus’s Descriptions of Dogs.

Columbus noted many different forms of animal life during his 1492 voyage of discovery (Campbell 1998), including dogs. To place them in better context, we note that there were several types of dogs (including barkless dogs) present in

South America (Allen 1920, Gallardo 1965, Weiss 1970), thus it can be speculated that more than one type or “breed” of dog was present in the Greater Caribbean (Saunders 2005). (Note: The use of the word “breed” here is used in a general sense and not in the technical sense as in the “breeds” recognized by the American Kennel Club.) It is through the accounts left by Christopher Columbus in his *Diario* (1989 [1492]:95) that there is an indication there were at least two types of dogs in the Bahamas based on his 17 October 1492 observations on Fernandina: “mastiffs” (*mastines*) (Figure 1) and “terriers” (*branchetes*) (Figure 2).



Figure 1. A modern mastiff-type dog showing the massive build, often brindle coloration, and black muzzle often associated with mastiffs (from [www.sunu-veisels.lt/amerikieciiv-mastifas](http://www.sunu-veisels.lt/amerikieciiv-mastifas)).

Today, mastiffs are characterized as large, powerful, shorthaired dogs having an apricot, fawn, or brindle coat with a dark mask. They were typically used for hunting larger game and as guard dogs. “Terriers” are characterized as small, active, fearless dogs, and are known as the traditional island dogs of Cuba and Puerto Rico, for

example. The “terrier” has several different names and has been called *perro jíbaro* (“wild [savag] dog”) as on Puerto Rico, “*aon*” by the Taíno, and *techichi* (“mat [floor] dog”) by the Nahuatl (Aztecs). These dogs were typically classified by either their size (which ranged from 0.91-31.75 kg [2-70+ lbs]) or function. The most common function of terriers was for hunting small game (agoutis, birds, hutias, rice rats, etc.), both over and under the ground. The name “terrier” essentially signifies “earth burrower.”

#### The Issue of Barklessness.

The characteristic of barklessness is described in a number of dogs that appeared in the Caribbean area and other parts of the Americas and appears in numerous firsthand accounts. Christopher Columbus recorded the presence of barkless dogs on his exploration of Cuba. For example, dogs observed on 27 and 29 October 1492 were said to have included “dog[s] that never barked” (*perro[s] q nūca ladro*); on another occasion, 6 November 1492, Columbus recorded, “Four-footed beasts they did not see, except dogs that did not bark” (*perros q no ladravā*) (Columbus 1989 [1492]: 117, 121). The Taíno word



Figure 2. A modern terrier-type dog on the beach. Today, this dog is sometimes referred to as *perro jíbaro* (“wild dog”) or feral dog on islands such as Cuba and Puerto Rico.

“aon,” a likely onomatopoeic word mimicking a howl (Taylor 1977), is perhaps an indication, as in other parts of colonial North America, “the Doggs of the Country are like their wolves and cannot bark but howle” (Strachey 1849 [1612]:125, Smith 1907 [1624], see also Hariot 1972 [1588]:20, Schwartz 1997, Zeisberger 1910:31).

There are three scenarios to explain the occurrence of the characteristic of barklessness. First, the physical explanation proposes that barklessness (as in the Basenji) may result from a shallower laryngeal ventricle and/or reduced mobility of the vestibular folds limiting movement of the vocal cords and the ability to bark (Ashdown & Lea 1979, Johnson 1971, Tudor-Williams 1976) (likely based on a genetic cause).

The second explanation is that breeding by humans may have selected for barklessness because the noise created by barking may have reduced hunting success or hunter/dog survival and may have attracted unwanted animal or human predators. In this scenario, barklessness would be a derived genetic trait resulting in the selection of quieter dogs (Scott & Fuller 1965).

The, third, or behavioral, explanation (albeit somewhat Lamarckian in nature) that has been put forth is that, through centuries of silent hunting, some dogs “lost the habit” of barking (Tudor-Williams 1983) or that domesticated dogs exposed to wolves or coyotes in the wild learned to howl instead of bark. This hypothesis suggests that vocalization (barking) is, at least in part, a learned behavior. Based on a 2012 personal communication with Dr. Ádám Miklósi of the Department of Ethology, Eötvös Loránd University, Budapest, a leading expert in dog behavior, there is no more substantive work than that of Scott and Fuller (1965) regarding the nature of barklessness in dogs, thus the cause of barklessness is currently understudied and unknown, although both genetic and behavioral causes have been cited.

#### DOGS AS OBJECTS OF CREATIVE EXPRESSION IN THE CIRCUM-CARIBBEAN

There are a number of depictions of dogs throughout the Greater Caribbean from the mainland rim to the Lesser and Greater Antilles. For

example, a cave painting of two dogs mating is found in the Dominican Republic at Cueva Pommiers (Figure 3) and a 2-m wide depiction of a dog at Guácara (Hoyo) de Sanabe (both undated but culturally Taíno). Petroglyphs of dogs are also found near Sarapiquí, Costa Rica and in the Dominican Republic such as the curly-tailed individual with erect ears found in Dajabón Province (Figure 4) (Atilés Bidó 2009:95, Fig. 7.1)

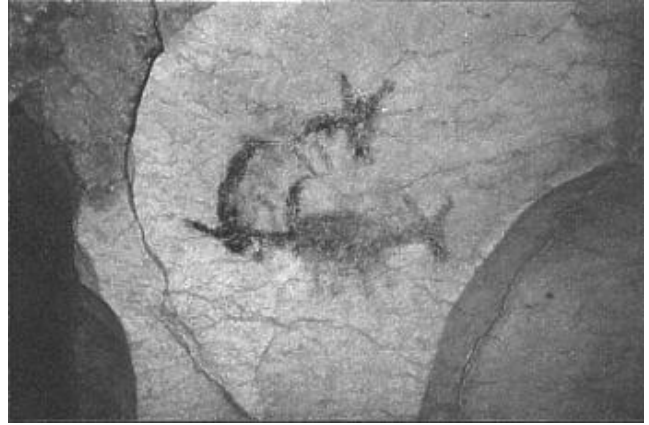


Figure 3. Cave painting at Cueva Pommiers, Dominican Republic, illustrating two dogs mating (from <http://www.centrelink.org/TainoCavePhotos.html>).



Figure 4. Petroglyph of a canine, Dajabón Province, Dominican Republic, ca. A.D. 1000-1500, Taíno (modified from Atilés Bidó 2009:95, Fig. 7.1) Note the erect ears and upturned tail.

(the latter being Taíno, dated stylistically to ca. A.D. 1000-1500).

Other renderings of canines occur as pottery *adornos* (decorations) or handles on vessels such as those found at: Morel, Guadeloupe (Saladoid); Vive, Martinique; and Cañas, Hacienda Grande, and Punta Candeler, Puerto Rico (Saladoid) (Mattioni & Bullen 1974, Waldron 2011). There is a whole Taíno effigy pot of a dog housed in the Fundación García Arévalo in Santo Domingo (Roe 1995). These images are typically naturalistic depictions of small- to medium-sized dogs, possibly with large heads, erect ears, and upturned tails.

The image of the canine has also been depicted in wood and stone, as in the two *duhos* or ceremonial seats found at Pitch Lake, Trinidad (Saladoid) and on the island of Hispaniola (Figure 5) (Taíno, A.D. 1000-1500). Images of dogs carved in stone include a steatite dog effigy head from Barbuda (Figure 6) (Taíno, dated to ca. A.D. 700-1500) (see also Olsen 1974:108, Fig. 30), a stone dog (or lizard?) head from a looted context in the Dominican Republic, and a Taíno dog effigy stone adze of unknown provenience thought to be from the Greater Antilles or Bahamas. A carving of the Taíno dog spirit, Opiyé-Guaobirán (Figure 7), has been found in Haiti and is housed in the Peabody Museum of Natural History at Yale. There is also a dog “idol” carved in stone from Cuba (Dacal Moure & Rivero de la Calle 1996:84).



Figure 5. *Duho* (ceremonial seat), or snuff platter, in shape of a dog (?), *lignum vitae*, Hispaniola (Taíno, A.D. 1000-1500) (from <http://www.loc.gov/exhibits/kislak/images/kc0020s.jpg>).

Depictions of begging or submissive dogs have been carved or molded in semiprecious stone and precious metals such as the gold curly-tailed dog from Guapiles, Costa Rica (ca. A.D. 400-900), the curly tailed dog pendant in agate from the Azuero Peninsula, Panama (ca. A.D. 400-900), and the Tairona *tumbaga* (gold/copper/silver alloy) pendant of a stretching, submissive, or play-begging dog from the Santa Marta region of northern Colombia (Figure 8) (A.D. 1200-1500).



Figure 6. *Steatite dog effigy head* (nasal snuffing device?) from Barbuda (Taíno, A.D. 700-1500), 14.7 cm high (from [http://www.kislakfoundation.org/pc\\_html/wi5.html](http://www.kislakfoundation.org/pc_html/wi5.html)). © Justin Kerr.

A shell maskette of the Taíno canine god was found on Antigua (Figure 9) and dog teeth necklaces and perforated dog teeth have been found at Sitio Conte and Cerro Juan Díaz, Panama (Cooke 2004, Lothrop 1937), and on the islands of Guadeloupe and in the Dominican Republic. Most of the Caribbean depictions of dogs are Saladoid or Taíno in cultural affiliation. Dog teeth necklaces from the Caribbean (Hofman et al. 2011, Laffoon et al. 2013, Schwartz 1997) and an apron of dog teeth from Sitio Conte, Panama (Figure 10) (Lothrop 1937) indicate that dogs and/or their teeth were being traded across the

Caribbean and perhaps from as far away as mainland South America. It is known that dogs in northern South America were commonly traded from owner to owner across expansive geographical territories (Gallardo 1965, Schwartz 1997). Dogs in South America were also traded for other goods such as metal, beads and perhaps cloth (Acosta et al. 2011, Allen 1920, Prates et al. 2010). Based on bone strontium analyses of dog teeth found on several Caribbean islands, it is now clear that dogs and dog teeth were traded around the Caribbean via regional and long distance trade (Hofman et al. 2011, Laffoon et al. 2013). Ethnographically recovered dog tooth necklaces housed in the Peabody Museum at Harvard from the



Figure 7. Stone carving of the dog spirit, *Opiyé-Guaobirán*, Haiti, Taíno culture. Image courtesy of Division of Anthropology, Cat. No. ANT. 237499. ©2013 Peabody Museum of Natural History, Yale University, New Haven, CT. Used with written permission. Note the ithyphallic state.

Carib, Cuna, and Cuneo, etc. cultures of Panama and northern South America suggest that the dog tooth necklace was important until historic and recent times. Figure 11 illustrates the locations of prehistoric dogs in ethnographic accounts, cave art, pottery, stone, wood, bone, teeth, metal, and skeletal remains throughout the Circum-Caribbean region, Central and northern South America.



Figure 8. *Tairona* canine pendant of a stretching or play-begging dog (?) with upturned tail, *tumbaga* (gold/copper/silver alloy), A.D. 1200-1500, Santa Marta region, northern Colombia. (Used with permission, Gold Museum, Colombia).

#### CANINE SKELETAL REMAINS IN THE BAHAMAS AND CARIBBEAN

Various canine skeletal remains, of both the mandible and postcranial skeleton, have been recovered from the Caribbean region (Miller 1916), in particular Barbuda (McGovern 2008, McGovern & Manigault 2009). At the Seaview site, Barbuda, remains of a small, compact, powerful, terrier-sized dog have been found and additional dog burials continue to erode from this site as of ca. 2007-2009 (McGovern & Manigault 2009, Fig. 7). One of the largest collections of



dogs (n=22) from a single site in the Caribbean, from Sorcé, Puerto Rico, indicated the presence of a medium-sized dog, relatively uniform in size (Wing 1991), and similar to the Taíno *aon* or Mesoamerican *techichi*. Based on colonial documents and early explorers' accounts, these dogs were of various coat colors and hair textures. The mean height of the Sorcé dogs was 42.7 cm at the withers (shoulder height), mean weight was 9.26-9.74 kg (about 20.4-21.4 lbs), and a number of interesting dental abnormalities were present (Wing 1991). For example, the first lower premolar (P<sub>1</sub>) appears to have been congenitally missing in 64% of the dogs, the third lower molar (M<sub>3</sub>)



Figure 9. Shell maskette of Taíno canine god, Antigua (A.D. 500-1500), carved *Strombus* shell, ht. 7.5 cm (3") (from [http://www.kislakfoundation.org/pc\\_html/wi1.html](http://www.kislakfoundation.org/pc_html/wi1.html)). © Justin Kerr.

congenitally missing in 11% of cases, and there is evidence that the fourth lower premolars (P<sub>4</sub>) were intentionally removed in 30% of the individuals analyzed (Wing 1991). Additional mandible and

postcranial remains of small, powerful, terrier-sized dogs from the Seaview site in Barbuda provide further insight into the skeletal measurements and nature of the dogs in the Caribbean region (McGovern 2008). Overall, skeletal remains of prehistoric dogs in the Circum-Caribbean indicate that the medium-sized dog was the most common or most geographically widespread. The sizes of the prehistoric dogs of the Caribbean can be compared to those in mainland North and South America, such as in Virginia, Mexico, Argentina, etc.



Figure 10. Dog tooth "apron" or loincloth from Grave 1, Sitio Conte, Panama (image from Lathrop 1937, Smithsonian Institution, Washington, D.C. [public domain]).

## HEIGHTS, WEIGHTS, AND HYPOTHESIZED DIETS OF THE DOGS

### Heights and Weights of the Dogs

Prehistoric dogs of the Caribbean appear to have been relatively uniform in size (i.e., medium-sized) and compare well with other collections of New World dogs. For example, a large collection (n=120+) of ancient dog skeletons from

Virginia (A.D. 750-1470) indicates that the Virginia dogs had a mean height of 42.34 cm at the withers and weighed some 8.20-19.92 kg (17.99-43.90 lbs) with a mean weight of 12.50 kg or about 27.51 lbs. The Virginia dogs also shared similar dental abnormalities with the dog from Sorcé, Puerto Rico, including congenitally missing P<sub>1</sub> (61% of cases), missing left upper first premolar (LP<sup>1</sup>) (32% of cases), and missing right upper first premolar (RP<sup>1</sup>) (36% of cases) (Blick 1988, 2000, 2006).

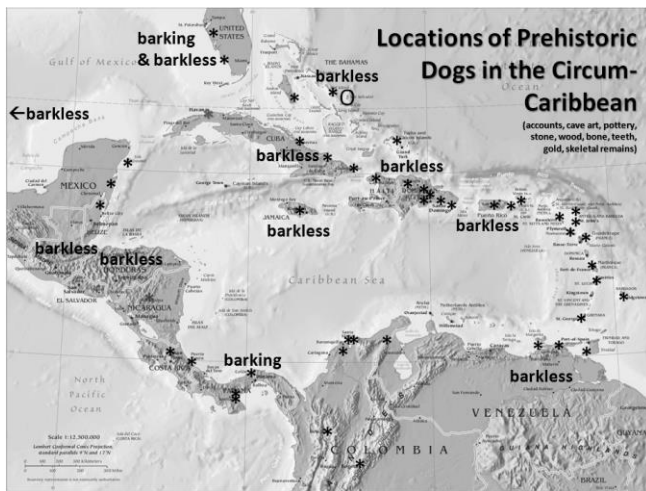


Figure 11. Map showing locations of prehistoric dogs in ethnographic accounts, cave art, pottery, stone, wood, bone, teeth, metal, and skeletal remains throughout the Circum-Caribbean region, Central and South America. San Salvador, which is not currently known to have yielded prehistoric canine remains, is circled (modified from a National Geographic map of the Caribbean).

Weights of other recovered prehistoric dogs, calculated using an allometric formula on certain bone measurements, indicate that Olmec dogs from San Lorenzo, Mexico averaged about 9.93 kg (22.3 lbs), and many other pre-Columbian dogs from Patarata, Santa Luisa, Chalahuites, and Cozumel, Mexico are mostly in the 8-12 kg range (ca. 19.5-25.3 lbs). Toward the poles, in both the Northern and Southern Hemispheres, it seems that larger dogs were more common than in subtropical or tropical areas (for example the 15.9 kg

[35.6 lb] dog from Cerro Lutz, Argentina dating to about A.D. 1020).

### Hypothesized Diets of the Dogs

Although stable isotope analyses (SIA) are becoming more common, it is safe to postulate a few general hypotheses regarding the diet of these dogs. For example, stable isotopes of carbon ( $\delta^{13}\text{C}$ ) and nitrogen ( $\delta^{15}\text{N}$ ) can give us an idea about the general diet of the animal over its lifespan, e.g., was it a terrestrial carnivore or did the dog consume more marine species which leave different isotopic signatures compared to terrestrial ones? With canines, the first assumption should be that dogs have a classic terrestrial carnivorous diet. This is probably a safer assumption to make on the mainland and inland. It has also been found that in many parts of Mesoamerica and Central America, and even in parts of North America, that dogs were scavenging human foods and/or were being fed maize (corn) by Native American peoples. Thus, another hypothesis should consider the possibility of maize or other human foodstuffs making their way into the diet of the dog (Allitt et al. 2008, Chilton et al. 2007, Hamblin 1984, Laffoon et al. 2013, Hofman et al. 2011, White et al. 2001, Wing 1978, 1991).

With island and coastal dogs, we should assume heavy reliance on marine resources such as fish, shellfish, crustaceans, seal, turtle, and others according to the proximity of the site to the seacoast and as indicated by specific ratios of  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  (Allitt et al. 2008, Chilton et al. 2007, Rick et al. 2011). Lucayan dogs of the Bahamas likely consumed much fish, as did their human counterparts.

### USES AND FUNCTIONS OF THE DOG IN THE CARIBBEAN

The importance of dogs in the cultures of the Bahamas and Caribbean is emphasized by the fact that dogs would have had to have been transported, ultimately from the South American mainland, by dugout canoe, into the Lesser Antilles,

Greater Antilles, and eventually to the Bahamian Archipelago (see Coutts & Jurisich 1973 for a Pacific island case). Clearly, this animal was utilitarian, serving a number of survival functions, as well as serving symbolic, ceremonial, religious, or other intangible needs. Regarding the symbolism of the dog in the Caribbean islands, Peter Roe (1995) has suggested that since the large predatory feline, the jaguar, was not present on the Caribbean islands, the dog came to replace the jaguar as the largest fanged animal of the islands, and the dog was considered, essentially, a “domesticated jaguar” which replaced the true jaguar in spiritual beliefs (Roe 1995). In parts of mainland South America, as among the Waorani of Ecuador, the jaguar was considered to be the spirit of a disembodied ancestor (or *meñe*) (PBS NOVA 1984) (clearly linked with death), and in some Caribbean languages the word for dog meant “little jaguar.”

The dog also often played the role of the companion animal, accompanying humans on their daily chores, and spending time around the settlement or perhaps sleeping with its owner(s) at night. Companion animals might manifest in the archaeological record as lame animals that had been cared for, or as inclusions in human burials. The companion dog would then be well positioned to play its role as guard, protector or sentry, serving as the village alarm (by howling or growling) upon the advancement of strangers or intruders. In many Mexican and Mayan cultures, the dog was also considered to have curative powers: placing a dog on an injury would draw out the sickness, or the dog could simply be used as a “hot water bottle” on an external wound or sore area. The dog also would have made a natural hunting companion, especially the terrier, in going after small game and rodents such as birds, hutia, and rice rats which were also eaten by humans. Based on the current evidence from the Caribbean, it does not seem that it was common to eat dogs as few remains of butchered or burned bones have been found in refuse middens (Wing 1991, 2008).

Another practical purpose served by dogs would have been that of scavenger or village “garbage disposal” removing from the ground sur-

face excrement, offal, rotten foodstuffs, and other detritus of human occupation. Dogs in some South American Indian villages, such as among the Mundurucú of Brazil, are even recorded to have licked the backsides of babies (Murphy & Murphy 1985). For men, who likely would have been the hunters and traders, the dog very well could have served as a status symbol; good hunting dogs are admired and it is known that there was a large-scale trading network for dogs or dogs’ teeth in the Caribbean and that historically known northern South American groups actively traded dogs. Items made of perforated dog’s teeth, canines and molars included necklaces of canine tooth beads or pendants and even loincloths or “aprons” made of dog teeth (Cooke 2004, Lothrop 1937).

Dogs in the Greater Caribbean are more often found in human funerary contexts than in midden (trash) contexts (Wing 1991, 2008) suggesting that the dog held an important spiritual position among the cultures of the Greater Caribbean (Hofman et al. 2011, Mattioni & Bullen 1974). It is likely that certain dogs were sacrificed to accompany humans to their graves and to serve as guides or companions to the afterlife (Schwartz 1997, see also Blick 2000, 2006 for a case from Virginia, USA). Dogs were symbolically associated with death and land of the dead. Fray Ramón Pane recorded information in the Dominican Republic in 1493 about a four-legged dog spirit named OpiyéI-Guaobirán (“the spirit of those absent...”) who guarded the path to the land of the dead which was known as Coaybay (Arróm 1975, Pané 1999, Roe 1995). The Taíno dog spirit can be seen in Figure 12. To come full circle, not only is the dog seen as a symbol of death but it is also seen as a symbol of fertility as in the cave painting of two dogs mating at Cueva Pommiers, Dominican Republic (Figure 3) and in the ithyphallic dog figurine from Haiti (Figure 7). It is not unusual to have such dualistic concepts associated with the dog which straddles both the human and natural worlds, civilized vs. wild, living and dead.

## WHY HAVEN'T WE FOUND MORE CANINE SKELETAL REMAINS IN THE BAHAMAS?

Canine skeletal remains are still fairly scarce in the Greater Caribbean and especially the Bahamas. Skeletal remains that have been found include a very small quantity at the MC-12 site on Middle Caicos (n=1) (Wing 2008) whereas the current largest collection of dogs in the Caribbean is from the Sorcé site, Puerto Rico (n=22) (Narganes Storde 1982, Wing 1991, 2008). Dog remains



Figure 12. Canine idol, wood, Taíno, A.D. 1000-1500, Santo Domingo, Dominican Republic (from <http://ancientantilles.com/Images/Traditional%20Narrative%20and%20Religion/strip4-deathzemis.jpg>).

are also reported for Cuba and the Dominican Republic (Miller 1916). In the Circum-Caribbean, dogs appear to have been used mostly as funerary offerings for humans rather than for food (Narga-

nes 1982, Roe 1995, Wing 1991, 2008), and because of this, canine skeletal remains might thus be found in remote locations such as caves and sinkholes accompanying human burials (see, for example, Schaffer et al. 2012).

Some have even postulated that there may have been burials at sea or canoe burials; if dogs accompanied their human masters to their watery graves, canine skeletal remains would certainly be scarce. At first this may sound farfetched, but a few cases from nearby regions may prove enlightening. For example, the Maya perceived the Milky Way as the “Canoe of the Underworld,” with a dog aboard as a passenger to the land of the dead, which sinks and disappears beneath the water (Foster 2005, Schele & Miller 1986, Schwartz 1997). The Central American Miskito and Talamanca peoples included a small canoe and a dead dog to accompany the deceased; they believed that a dog paddled the soul across a river to the underworld (Schwartz 1997:98). These examples suggest that the hypotheses that dogs may have been buried in caves, sinkholes, or possibly at sea might explain why there have not been more discoveries of canine skeletal remains in the Bahamas.

## THE SANCTUARY BLUE HOLE DOG

Sanctuary Blue Hole is located on the east coast of South Andros Island, Bahamas near The Bluff village and Stargate Blue Hole. It was at Sanctuary Blue Hole in the early- to mid-1990s that remains of prehistoric Lucayan human and canine remains were discovered by diver Brian Kakuk and team. Remains of these prehistoric human and canine remains were recovered from a depth of some 34 m (110 ft) (see Palmer 1997). This example, brought to our attention by Neil E. Sealey, provides some evidence that prehistoric dogs may well accompany human burials in sinkholes and caves, at least in the Bahamas. Plans to investigate, measure, photograph, and radiocarbon date the Sanctuary Blue Hole dog are being made as this article goes to press. Human skeletal remains recovered at Sanctuary Blue Hole can be seen in Figure 13.

## CONCLUSION

Descriptions of dogs in the Bahamas and Caribbean began with Columbus's 1492 voyage as he was the first to recognize and describe dogs from Fernandina, Bahamas and northern Cuba as



Figure 13. Diver Brian Kakuk recovering human skeletal remains from Sanctuary Blue Hole, Andros Island, Bahamas where prehistoric dog remains have also been recovered. The photograph was taken by ©Wes Skiles, now deceased (from [http://www.alertdiver.com/Tribute\\_to\\_a\\_Legend](http://www.alertdiver.com/Tribute_to_a_Legend)).

being of large and small sizes (*mastines* and *branchetes*) and “dogs that never barked” (Columbus 1492 [1989]). The issue of barklessness in Native American dogs has yet to be resolved.

Based on the current archaeological evidence, dogs in the Intermediate Area just south of the Circum-Caribbean had been present in main-

land South America since at least Valdivia III times (ca. 2800 B.C.) at Real Alto, Ecuador (Marcos 1988) and on the Caribbean fringe of northern Colombia and elsewhere in more recent times (Angulo Valdés 1981, Ardila 1983). In the Circum-Caribbean proper, dogs appear to have been present since at least the Saladoid period ca. A.D. 1-200, perhaps earlier (Hofman et al. 2011). Differing varieties of dogs from the South American mainland (Saunders 2005) would have provided the population which then could have been transported by northern South American peoples via dugout canoe in their multiple migrations northward from about the mouth of the Río Orinoco to the Lesser and Greater Antilles, and eventually to the Bahamas island chain. As part of the migrants' material culture, animals such as agoutis, armadillos, guinea pigs, hutias, opossums, peccaries, and dogs (Giovas et al. 2011) were transported in an attempt to make the new islands survivable and familiar.

Skeletal remains of prehistoric dogs in the Circum-Caribbean appear to represent this geographically widespread, medium-sized dog, the Taíno “*aon*” or the Nahuatl “*techichi*.” Dogs of a similar size are reported from mainland Colombia, Panama, Honduras, Guatemala, Florida, up the U.S. Atlantic Seaboard and beyond. Images of prehistoric dogs appear in rock paintings, petroglyphs, woodcarvings, shell, stone, gold, and pottery across the Circum-Caribbean region. There also appears to have been a prehistoric and early historic period tradition of trading dog teeth for manufacturing dog tooth necklaces, loincloths, and other jewelry. Long-distance trading of dogs, from northern South America, Central America, and the Lesser and Greater Antilles has also been reported.

Dogs served numerous purposes throughout the cultures of the Caribbean including companion, curative, food item, guardian, hunter, scavenger, status symbol, trade object, sacrificial offering sometimes accompanying human burials, and symbol of death and fertility. The four-legged dog spirit of the Taíno, Opiyél-Guaobirán, was said to have stood guardian by the lakeshore on the route to the land of the dead, Coaybay.

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