



## *Research Article*

# THE ECOLOGY OF AN UNCATALOGUED HOMINOID IN THE BOREAL FOREST (TAIGA) OF NORTH AMERICA AND EURASIA

John Bindernagel\*

*Courtenay, BC, Canada*

**ABSTRACT.** Accumulating trace and physical evidence, combined with Aboriginal traditional knowledge and experience, suggests the existence of an uncatalogued hominoid in the Holarctic. Skeptics challenge that a large hominoid would not be adapted to the severe climate and limited food resources of the northern latitudes. In this paper, I address ecological aspects of hominoid research, which both Eurasian and North American researchers share in common. It concerns a major habitat apparently occupied by this hominoid, the boreal forest biome or taiga, which is the largest biome on Earth. It is a unifying theme, which we continue to investigate in our attempts to understand how this hominoid survives in this biome.

**KEY WORDS:** sasquatch habitat, feeding, overwinter survival, Aboriginal culture, tracks

## INTRODUCTION

In preparing this paper<sup>1</sup>, I was reminded of a source of resistance, which this conference, by its international nature, speaks to. This is the problem of the number of different regional names for this hominoid. Some names are countrywide or even continentwide in their use (Fig. 1).

Like some investigators, I have become convinced that all these hominoids are either the same or very closely related. But because this hominoid is known by different names in different countries, many scientists do not realize that investigators may be discussing the same or closely-related species.

Many names for this hominoid are

regional, local, or restricted to ethnic or cultural groups. In Canada there are over thirty names assigned to this hominoid by aboriginal peoples. Within Russia, a similar situation apparently occurs (Fig. 2).

Just as the scientific community remains unaware of the circumpolar distribution of the hominoid in the boreal forest of three continents, so too various aboriginal groups appear to be unaware that the hominoid they refer to with a specific name may be the same hominoid known to neighboring groups of people elsewhere in their country. This problem was pointed out clearly in the writing of Dmitri Bayanov (1996), who noted that most of the ethnic groups he worked with in Russia perceived the hominoid as restricted or unique to their region. The use of the term “hominoid,” as used by Bayanov in his writing, is a useful and inclusive term and has been adopted for use in this paper.

---

<sup>1</sup> As presented at the International Scientific and Practical Conference on Hominology, Moscow and Mountain Shoria, Russia, October 5-8, 2011.

### **Physical Evidence for This Uncatalogued Hominoid in North America**

It may be useful to briefly review the forms of physical evidence supporting the existence of this northern hominoid in both North America and Eurasia. In North America there are literally thousands of eyewitness accounts describing this hominoid and its behavior. Although these eyewitness descriptions and drawings have been of great use to investigators, they have not attracted the attention of scientific colleagues who remain unaware of the many points of widespread anatomical similarity in this evidence. Nevertheless, it may be worth noting that eyewitnesses have described and depicted adult male, adult female, and subadult or infant hominoids, suggestive of a biological population (Fig. 3).

#### **Tracks**

It is physical evidence that may eventually prove to be most useful in convincing scientific colleagues to scrutinize the evidence which supports the claim of an extant hominoid in North America and Eurasia.

Hominoid tracks, when documented in photographs and as casts, provide the necessary corroborating evidence for this hominoid as a track-leaving mammal (Fig. 4).

Unfortunately, in North America, the value of track casts as physical evidence has become tainted by claims of hoaxing, which have influenced scientific colleagues and kept them from fully engaging this form of evidence. Even though the fabricated hominoid "feet" brought forward by hoaxers do not resemble actual hominoid tracks, the North American media – and even scientists – have accepted such hoax claims as invalidating all, even potentially actual, hominoid tracks (Fig. 5).

#### **Twisted and bent saplings**

Another form of North American physical evidence that warrants scientific attention is tree modification or damage in the form of twisted and bent saplings. This evidence has not been widely investigated or scrutinized, and its link to this hominoid is not yet firmly established. Nevertheless, it is a phenomenon otherwise unexplainable and may be a form of marking by this hominoid. Similar signs have been observed in Eurasia (Fig. 6).

#### **Nest-like structures**

Similarly, there are nest-like structures which appear to have been made by this hominoid in North America and which are not otherwise easily explained. The first was photographed in a remote area of central Washington. The second is a crude shelter constructed of bark slabs and matted twigs on top of a low tree branch, open at two ends. It was observed on the Olympic Peninsula in Washington State.

#### **Hominoid Ecology, Especially Food Habits**

The main subject of this paper is the ecology of this hominoid, and especially its food habits. Investigators attending this conference support the claim that this hominoid exists, and in addition, that it exists in the boreal forest or taiga of both North America and Eurasia.

Those of us called upon to defend this claim have become aware of a particular criticism against it. This criticism has been summarized as follows: The creature is not currently recognized or cataloged by science, which generally reject the possibility that such mega-fauna exist, because of climate and food supply.

This criticism is, of course, a theoretical objection, which states that, ostensibly, the climate and food resources of some of the regions where this hominoid is claimed to

occur, cannot support it. One such region is the boreal forest or taiga (Fig. 7). There is, however, physical evidence supporting the existence of this hominoid in this biome, inhospitable as conditions may be.

Physicist Michael Friedlander once defended evidence which may appear to lack a theoretical basis, or which appears to oppose theoretical objections:

It is the reality and correctness of the observations that must be examined, and the theory will follow in due course if the observations are correct (Friedlander, 1995).

Friedlander's point – when applied to this situation – is that prevailing theory may not support the existence of an uncatalogued hominoid in the boreal forest of North America or Eurasia. However, if the evidence of eyewitnesses and the physical evidence of tracks is valid, then a theory will subsequently emerge to explain its existence there. If the serious attention of scientific colleagues is to be attracted to reports of this hominoid in the boreal forest, it will be necessary to demonstrate its potential ecological viability in this and other biomes.

### **The Marine West Coast Forest Biome of North America**

Before addressing the boreal forest biome as hominoid habitat, it may be useful to address a narrow strip of land and sea coast at the western edge of the boreal forest on the west coast of North America. This region is known as the “Marine West Coast Forest” (Fig. 8). Although it is less than a hundred miles (160 km) in width, it is considered a biome, a unique habitat. It is basically the interface between the boreal forest and the north Pacific Ocean, extending from northern California to Alaska. Because it includes the rich intertidal zone, this habitat probably supports the highest density of this hominoid in the world and it is here that the criticism of climate and food supply to support a popu-

lation of this hominoid is most readily countered.

The richness of food resources in this biome transcends that of the boreal forest, especially during the autumn when salmon spawning occurs and during the winter when the clam beaches are exposed at low tide under the cover of darkness.

### **Aboriginal Culture as Evidence of the Richness of the Marine West Coast Biome of North America**

Evidence for the biological richness of this habitat is the well-documented ability of the Aboriginal people of this coast to not only survive, but to thrive and develop sophisticated art forms. Art was applied to everyday items such as clothing and even to boxes used for food storage.

Carved masks and crests on totem poles are well-known examples of Aboriginal art in this region. Not surprisingly, this art depicts the animals and birds with which the aboriginal people share the environment. Some of these animals, such as the frog, are easily identified. Others require some knowledge of the species depicted such as the beaver, which exhibits large incisor teeth and a characteristic broad flat tail, and which holds a stick in its front paws.

Then there is the *dzonokwa*, the Wild-Woman-of-the-Woods, whose characteristics include giant size, pursed lips, and pendant breasts (the pendant breasts are especially reminiscent of a number of Russian eyewitness descriptions of the hominoid in the Caucasus region and elsewhere). Not surprisingly, most cultural anthropologists have considered the *dzonokwa* to be a mythical being in the sense of supernatural. Most hominoid investigators, on the other hand, recognize *dzonokwa* as a depiction of a female hominoid.

In addition to the representation of this hominoid in aboriginal carvings, there are

reports to anthropologists of this hominoid from the north coast of British Columbia, where it is known as the “*boqs*.” The *boqs* was described to an anthropologist by an Aboriginal informant as follows:

“This beast somewhat resembles a human ...It walks on its hind legs, in a stooping posture, its long arms swinging below the knees...” (McIllwraith, 1926).

Despite the anatomical details provided by the informant, the anthropologist included it in his published report as one of several “supernatural animals” that he had heard described. Regarding the anthropologist’s categorization of this animal as supernatural, it should be noted that a folklorist once cautioned:

It cannot be proven that the Indians themselves saw these creatures as mythical, but anthropologists and other scholars have generally considered them as such (Henderson, 1976).

This misunderstanding is another point of common interest to investigators in both North America and Eurasia – a widespread perception and a body of anthropological literature in which hominoids described by members of aboriginal or ethnic groups are treated as mythical or supernatural by cultural anthropologists. Unfortunately, it is the cultural anthropologists who have traditionally been consulted as representing the scientific discipline with appropriate expertise to interpret such reports. The published views of cultural anthropologists consequently form the preponderance of prevailing knowledge with regard to uncatalogued hominoids.

### **The Deciduous Forest Biome**

Before addressing the boreal forest biome itself, there is another biome that warrants discussion. Like the rich marine west coast forest of northwestern North America discussed above, this biologically rich biome also lies adjacent to the boreal forest biome. This is

the “temperate deciduous forest biome.”

This biome may rate second only to the marine west coast forest of northwestern North America in its biological richness. Like the boreal forest, it occurs around the world but in discontinuous patches in eastern North America, central Europe, and eastern Asia (Fig. 9).

The richness of this biome is attested to by the extent to which it has been developed for agriculture by modern humans and by the high density of the human populations, which occupy it.

However, there are still remaining large patches of deciduous forest in this biome, which support this hominoid in North America and Eurasia. Food sources here include nuts, berries, and a plethora of small, medium, and large mammals, as well as waterfowl and upland game birds such as grouse and wild turkeys.

### **Boreal Forest Biome (Taiga)**

Finally, this discussion of biomes addresses the boreal forest or taiga, that globe-encircling biome, which unifies research into the ecology of this hominoid. This biome is clearly occupied by the hominoid under study, but perhaps not in large numbers. It is this biome that is particularly singled out by skeptics because of its adverse climate and insufficient food, conditions perceived to preclude the existence of a large hominoid in this habitat. The criticism is not without some merit, and gives rise to the question: Since, even in summer, this biome appears to provide only meager food resources, how then does this hominoid manage to survive the winters in a region in which winter conditions are characterized by severe cold combined with significant snow cover?

This question addresses the subject of hominoid food habits, a subject that includes feeding methods and feeding strategies.

### Feeding Methods or Feeding Strategies

There are several methods or strategies, which this hominoid appears to use to obtain food throughout its range.

#### Foraging

Berries, seeds, and aquatic plants are obvious examples of wild fruit and vegetation, which are available through foraging or gathering to both this hominoid and to modern humans.

On the coasts, shellfish can also be obtained by foraging. The name “Cockle-eater” applied to this hominoid by Aboriginal people on the British Columbia coast of Canada is especially interesting. Cockles are a species of clam preferred by both Aboriginal people and this hominoid. These clams are unique because they lie near – or even on top of – the surface of the beach, are easily obtained by foraging with no need for digging.

Another form of meat which can be obtained by foraging and digging are hibernating ground-squirrels. A detailed report from the mountains of Oregon describes the observations of a man who watched a sasquatch dig up hibernating ground squirrels and eat them. The pit dug by the sasquatch in loose rock was some 5 feet (1.6 meters) deep. Several ground squirrels, along with bedding material consisting of moss and grass, were extracted from the pit and eaten whole. Before digging the pit, the sasquatch had picked up rocks, smelled them, and then stacked them in piles as it apparently tested each rock for the odor of ground squirrels (Fig. 10).

Interestingly, a report of a hominoid feeding on ground squirrels in Tajikistan was described by Dmitri Bayanov. In this case, the hominoid appeared to have dug up soil to extract ground squirrels from their burrows. Bayanov referred to other reports suggesting that ground squirrels and other rodents may be an important source of protein for hominoids.

### Predation

There are several North American accounts of this hominoid actually catching a deer after a short chase, breaking its neck, and carrying it away. The Russian literature records that in eastern Siberia, this hominoid feeds on wild deer. In northern Russia, it was reported to hunt reindeer, by investigator Vladimir Pushkarev.

Regarding predation, the structure observed and photographed in Washington in 2009, may be of interest. This structure makes most sense as a hominoid “blind” or “hide” for use by the hominoid functioning as an ambush predator on elk or wapiti (known as “red deer” in the UK, “maral” in much of Eurasia, and “Siberian stag” in Siberia). This hypothesis is based on its construction in an elk feeding area, which is possibly also an elk calving area. The structure, although crude, required considerable manual dexterity to construct the roof of matted twigs, but is unlikely of human origin. For now, however, its origin and purpose must remain undetermined.

If this structure is a hunting blind, it might qualify as a tool, used by the hominoid as an aid to procuring food. The possible use of tools to obtain food is a recurring subject with regard to this hominoid.

For example, a Russian report from Tajikistan includes a suggestion by local people that forked sticks found near the entrance holes to rodent nests may have been used by this hominoid (named “guls” in that area) to catch mice. Similarly, the use of a stick to dig clams has been mentioned in several North American reports.

In addition, the use of a stick as a club by a hominoid to intimidate deer and to bludgeon waterfowl has been reported in North America. A British Columbia eyewitness once heard the sound of something slapping the surface of the water near shore in a shallow west coast bay. Approaching the sound by

walking around a point of land, she was confronted with a soaking wet hominoid holding a stick in one hand and several ducks in the other.

### **Food stealing, piracy, or appropriation**

In northwestern North America, there are many reports of hominoids availing themselves of salmon caught by Aboriginal people. This activity includes taking salmon from nets, and from drying racks and smoke houses where Aboriginal people were preserving salmon for the winter use.

A similar situation may sometimes apply to the stealing of game carcasses. In North America, there are several reports of this hominoid taking a game carcass from hunt camps or logging camps where a deer carcass has been hung overnight.

A report presented by Dmitri Bayanov from the Chukchi Peninsula suggests that it is common knowledge there that a game carcass left overnight would be gone by morning "with hominoid footprints around the location," the meat taken.

### **Overwintering strategies: hibernation or torpor**

This discussion of food acquisition leads to the possibility of food storage and to the larger issue of specific overwintering strategies.

Several reports from northern Russia reveal the belief of local people that this hominoid "sleeps" or "hibernates" during the winter. This belief is based partly on the relative absence of sightings in winter or tracks in snow.

When the Russian investigator Vladimir Pushkarev concluded that the "annual biological cycle" of this hominoid in northern Russia is "close to that of the brown bear," he was implying a period of hibernation or torpor during winter. Similarly, Russian investigator Maya Bykova quoted a man from the Komi

region of Siberia, stating that "at this time of year [October] he usually sleeps."

The idea of hibernation or a period of torpor is supported to a large extent in northern North America by the similar rarity of hominoid tracks in snow. On the other hand, at least some hominoid tracks are observed in snow and there are some eyewitness reports of hominoids in winter both in North America and northern Eurasia. This suggests a possible overwintering strategy as used by bears, that is, a period of torpor, or reduced activity, during periods of severe cold or periods when food is unavailable or severely limited.

### **Storing food in "caches"**

There is an overwintering strategy used by an unrelated mammal of the boreal forest and tundra, the wolverine (*Gulo gulo*). This strategy is food "caching" or the storing of meat in underground burrows, crevasses, or snowbanks. Wolverines reportedly capture birds and mammals and store their carcasses as food not only for winter use but even for extended use into the spring when the young are born. The use of this strategy elsewhere in the animal kingdom raises the question: "Could this hominoid employ a similar strategy?"

### **Steatopygia: fat storage in the body, especially the buttocks**

A report from the Kola peninsula of northern Russia includes an interesting comment by a senior game warden who was called to investigate the reported activities of a hominoid that had been interacting with a group of campers in late summer. Reflecting on his brief observations of the hominoid, he stated: "What especially struck me was its big round...buttocks."

An even more remarkable report on this subject was recorded by Dmitri Bayanov, from the border region of Russia and China in eastern Kazakhstan. This report refers to these

hominoids being hunted as food, and the fat from the buttocks being used as cooking fat.

The deposition of fat in the buttocks of humans (steatopygia, which means “fatty rump”) is best documented for the Khoisan people of Africa, including the Khalihari bushmen who live in a desert of southern Africa. Female Khoisan people are noted for their ability to store fat in their buttocks in advance of the dry season, a period of extreme food deprivation.

### Migration

A vertical migration downward from high elevations to lower elevation in winter is a well-recognized wintering strategy of ungulates such as deer, elk, moose, and wild sheep in the mountainous areas of North America and northern Eurasia. This is a natural response to the cold and snow of high elevation in winter and the comparatively milder temperatures and reduced snow depth, which prevail at lower elevations.

On the west coast of North America, such a downward migration is hypothesized for this hominoid, where it may explain its increased presence on coastal clam beaches in winter. A vertical migration is particularly easy to understand in this region, where the mountainous summer habitat lies in close proximity to the clam beaches.

Such a winter migration has been suggested for this hominoid in Tajikistan. Local people there explained its absence from the mountainous areas that predominate in this region, by migration to the low elevation area in the south of the region (Bayanov, 1996).

### CONCLUSION

The historical and contemporary observations of an large upright hominoid in North America and Eurasia, finds corroboration in the accumulating trace evidence – tracks, tree breaks, nests, etc. The objection

that the climate and food resources of the northern biomes are unsuited for a hominoid is not without merit, but clearly not wholly justified.

This discussion of feeding and overwinter survival in the boreal forest raises the question: Why would the hominoid choose the boreal forest biome as a home when richer habitats exist not far to the south? There are at least two possible answers to this question:

(1) The first is that modern humans occupy those rich and fertile habitats to the south, especially the temperate deciduous forest biome. A natural shyness on the part of this hominoid may account for its reluctance to compete with modern humans there.

If this hypothesis is correct, then it suggests that the hominoid may live in the boreal forest not by choice, but may have been pressured to retreat from more favorable habitats – displaced by expanding human populations. This could explain why small populations of the hominoid persist in remaining patches of wilderness within the temperate deciduous forest biome, but why it is more widespread in the less-occupied boreal forest biome.

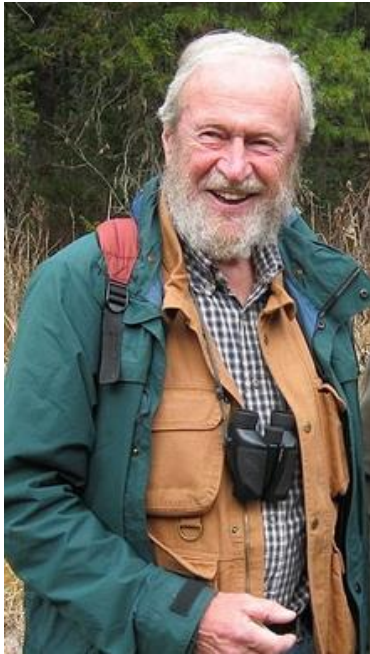
(2) The second answer is that these hominoids appear to be well-adapted to temperate, even subarctic environments. As such, they – like Aboriginal people of the northwest coast of North America – may be more comfortable with cold conditions, than are other humans.

### LITERATURE CITED

- Bayanov, Dmitri. *In the Footsteps of the Russian Snowman*. Moscow: Crypto-Logos, 1996.
- Freidlander, Michael W. *At the Fringes of Science: Science, Science Contested, and Pseudoscience*. Boulder: Westview Press, 1995.
- Henderson, Carole M. *Monsters of the West: the Sasquatch and the Ogopogo*, In *Folklore of Canada*, ed. Edith Fowke (ed.)

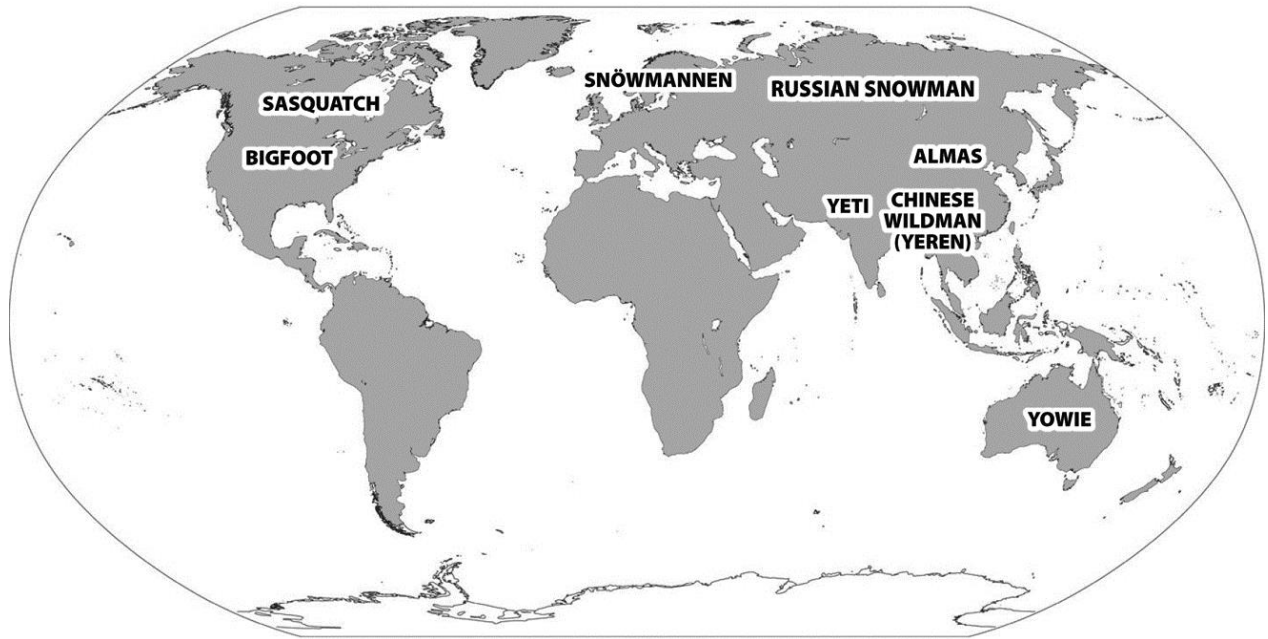
Toronto: McClelland and Stewart, 1976.  
 McIlwraith, Thomas F. Certain Beliefs of the  
 Bella Coola Indians Concerning Animals,  
 35<sup>th</sup> Annual Archaeological Report 1924-  
 1925 (being part of) Appendix to the

Report of the Minister of Education,  
 Ontario: Toronto, R. B. Orr (ed.) (Toronto,  
 1926), pp. 19-20; T. F. McIlwraith, *The  
 Bella Coola Indians*, vol. 2. Toronto:  
 University of Toronto Press, 1992.



I am a professional wildlife biologist, who is seriously studying the sasquatch or bigfoot in North America. My interest in this animal began in 1963 when, as a third-year-student in wildlife management at the University of Guelph in Ontario, Canada, I was laughed at for raising the report of an animal described as an “ape-man” for possible discussion. My fieldwork began in 1975 when our family moved to British Columbia, partly in order for me to begin fieldwork on this species. In 1988, my wife and I found several sasquatch tracks in good condition in the mountains not far from our home on Vancouver Island. Plaster casts, which we made from these tracks provided the first physical evidence for the existence of the sasquatch. Wildlife biologists such as myself regularly depend on tracks and other wildlife sign as evidence for the presence of bears, deer, wolves, and other mammals, recognizing that tracks constitute a more reliable and persistent record of the presence of a mammal species in an area than a fleeting glimpse of the animal itself. I am satisfied that the sasquatch is an extant (or “real”) animal, subject to study and examination like any other large mammal, and am much more concerned with addressing ecological questions, such as how it overwinters in the colder regions of North America, than with dwelling on the controversy of whether it does or does not exist. I remain aware, however, that many people – including scientific colleagues – remain unaware of the information that exists about this species. [Editor’s Note: John Albert Bindernagel, 76, passed away during the evening of January 17, 2018. He published two influential monographs, the first in 1998 entitled *North America's Great Ape: the Sasquatch*. His second book, *The Discovery of the Sasquatch – Reconciling Culture, History, and Science in the Discovery Process*, was published in 2010. As a personal friend and professional colleague, he will be sorely missed. See RHI 7:1-5 (2018).]





**Figure 1.** The names for this uncatalogued hominoid, which are countrywide or even continent-wide in their use.



**Figure 2.** Some of the regional or local names for this uncatalogued hominoid used by ethnic groups in Russia.



**Adult male  
(Washington State)**  
Courtesy of Darin Richardson



**Adult female carrying infant  
(Alberta, Canada)**  
Courtesy of John Green



**Subadult male  
(British Columbia, Canada)**  
Courtesy of Ken Berkeley

**Figure 3.** Eyewitness drawings of the North American hominoid known as sasquatch.

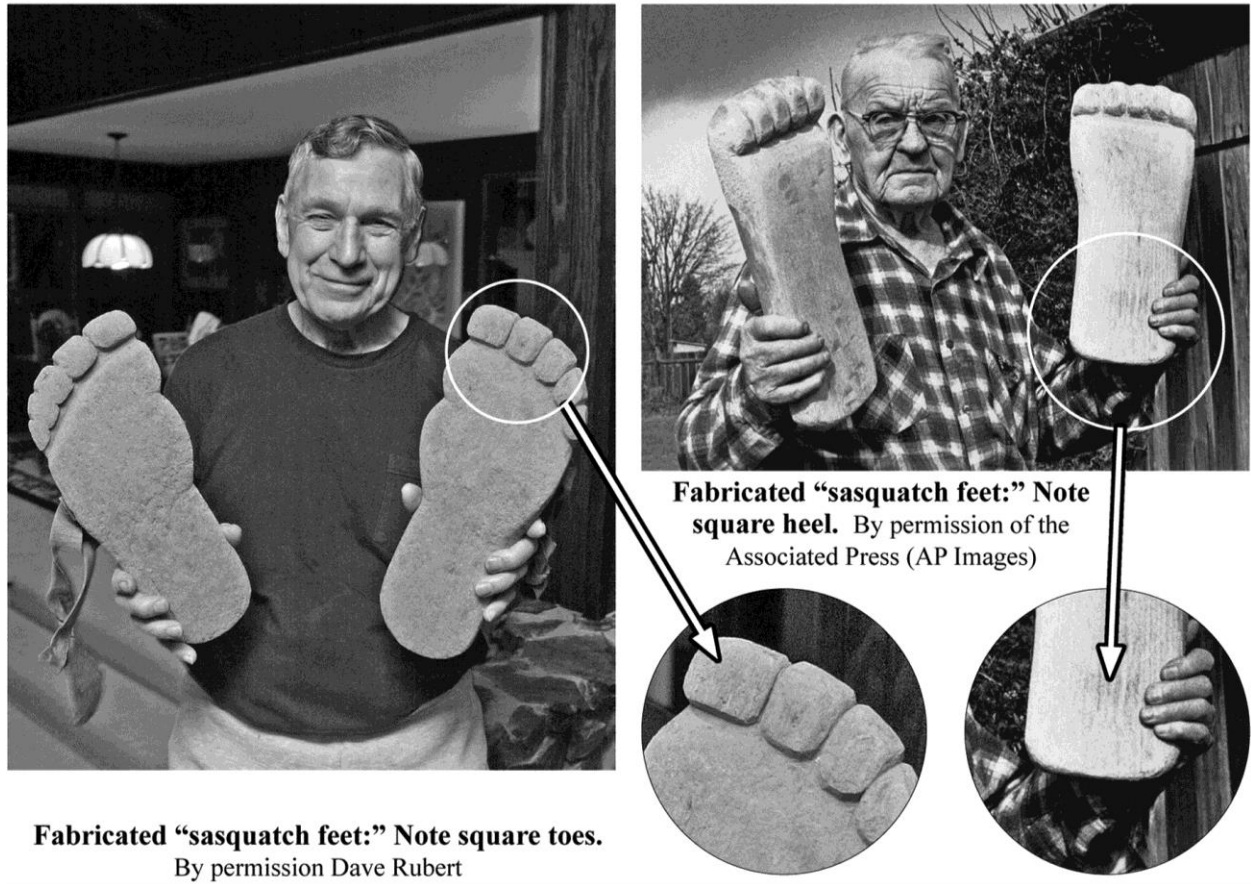


**Sasquatch track**  
**(Trinity National Forest,**  
**northern California)**  
Courtesy of John Green

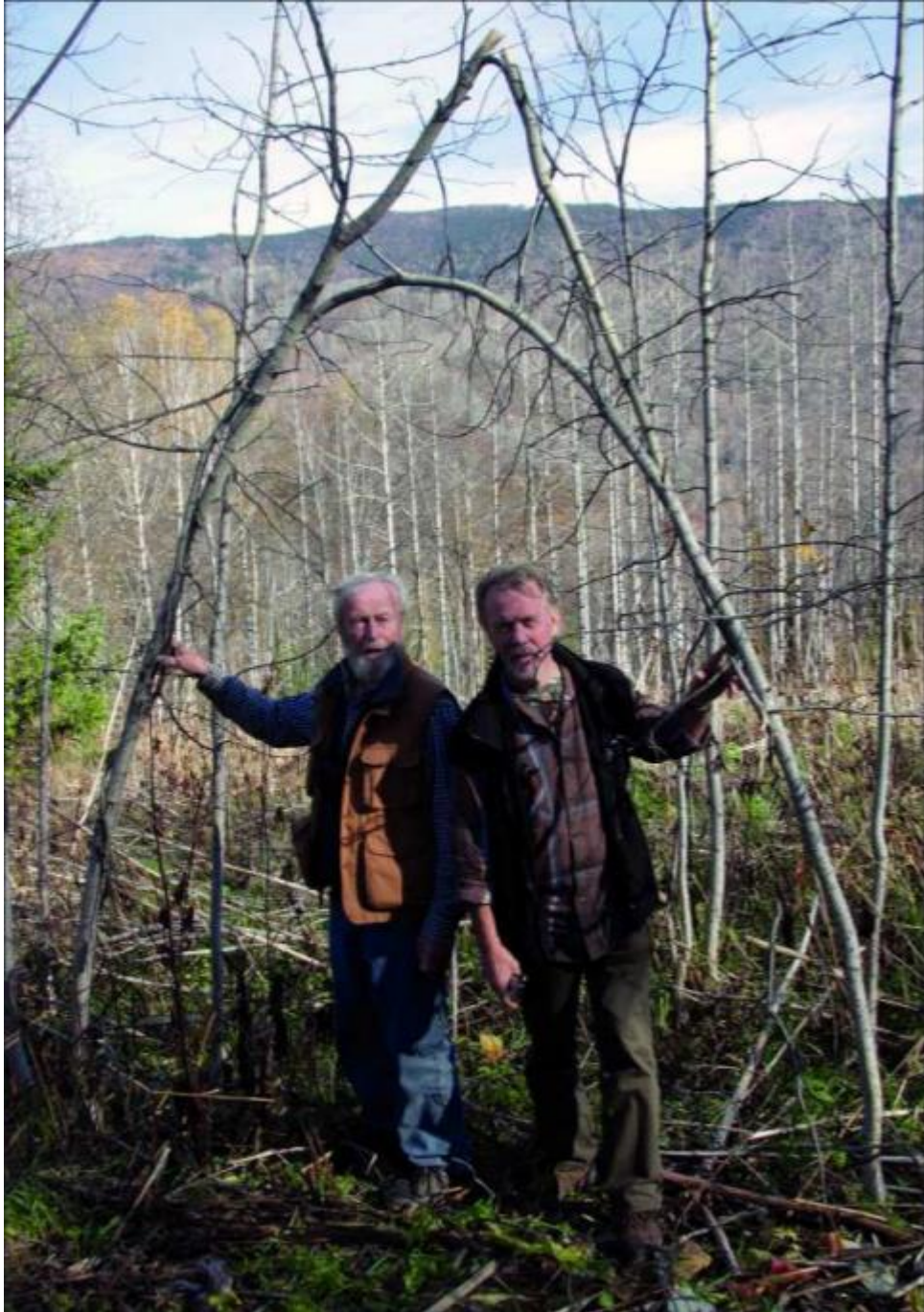


**Sasquatch track casts**  
**(Vancouver Island, British Columbia)**

**Figure 4.** Examples of tracks of the North American hominoid known as the sasquatch documented in photographs or as casts.

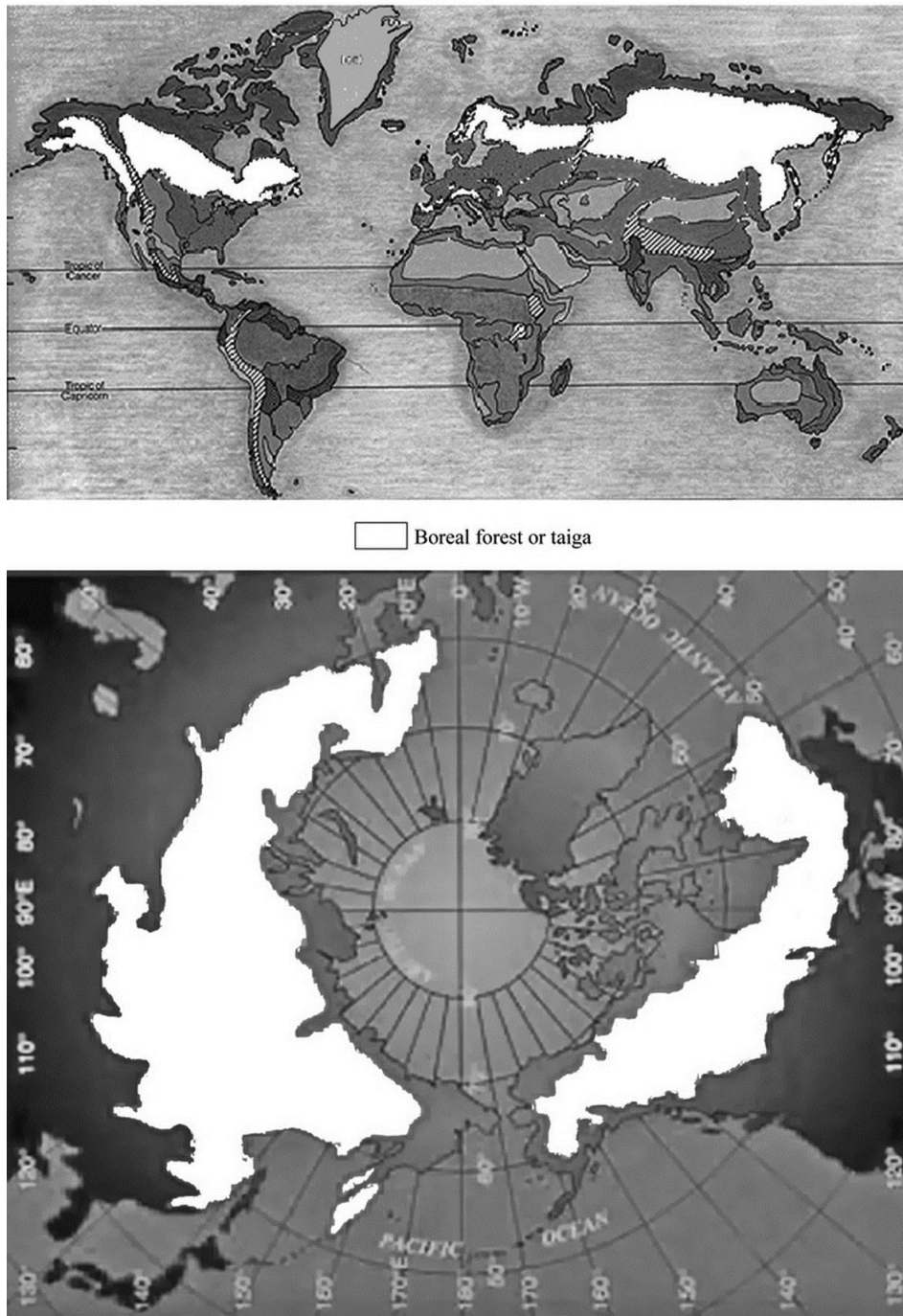


**Figure 5.** Examples of fabricated “hominoid feet” proposed by hoaxers to explain sasquatch tracks.

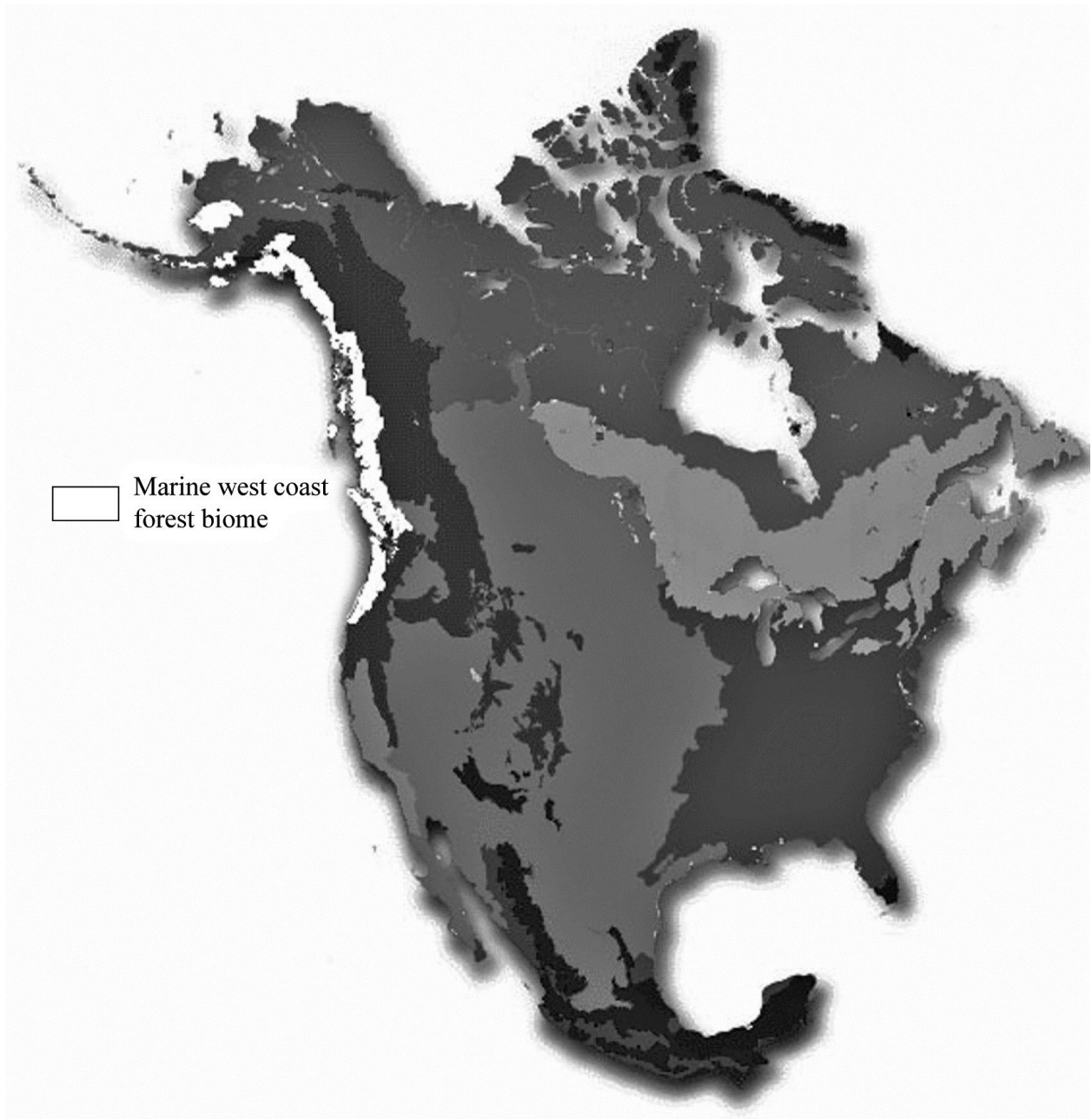


**Figure 6.** Author and Ron Morehead inspecting an unusual tree arch in Siberia.



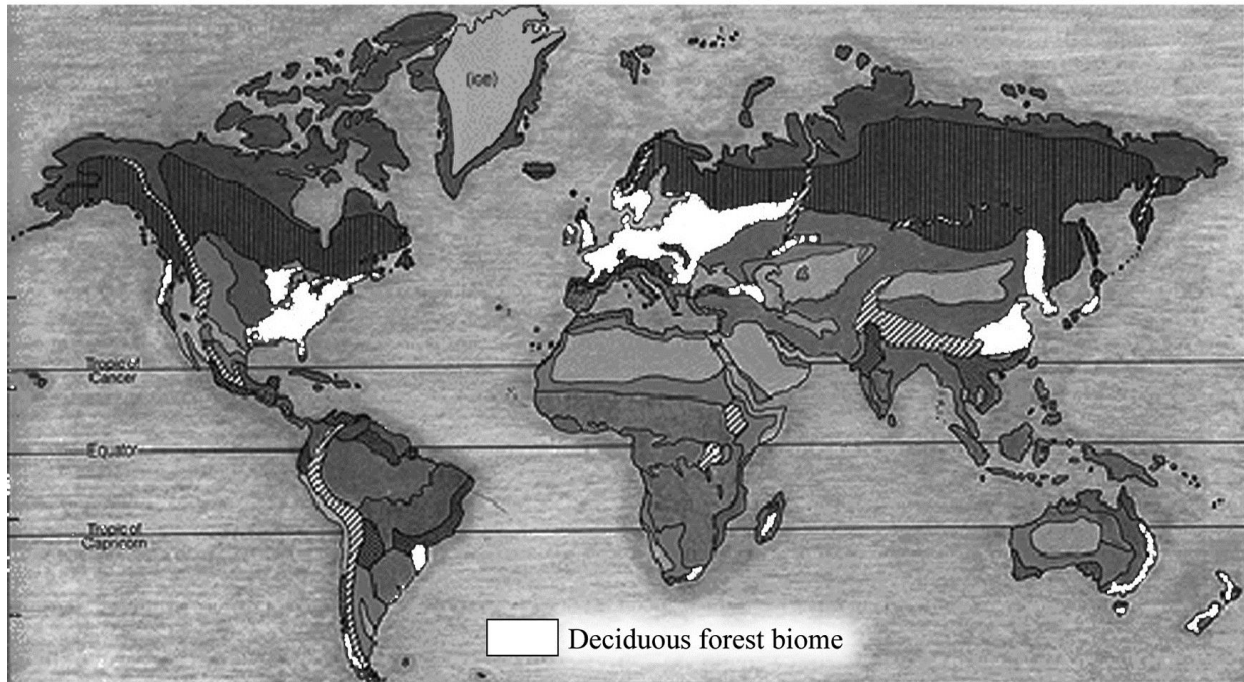


**Figure 7.** The circumpolar distribution of the boreal forest or taiga in North America and Eurasia.



**Figure 8.** The marine west coast forest biome of North America.





**Figure 9.** The discontinuous deciduous forest biome.



**Rock piles stacked by two sasquatches searching for hibernating ground squirrels**



**Author standing in pit dug by male sasquatch foraging hibernating ground squirrels from hibernaculum deep in rocks**

Courtesy of John Green

**Figure 10.** Physical evidence associated with uncatalogued hominoids (sasquatch) feeding on hibernating ground squirrels (Oregon).