Animalivm genera vti multa, variaque sunt in toto terrarum orbe, suis provinciis, & naturis appropriata, ac distributa, vt elephantes, cameli, leopardi, leones, struthiones, tigrides, simæ, & id genus reliqua, sine pilorum densitate in calidis terris numero incomparabili multiplicata: Ita & in frigidis regionibus complures reperiantur bestiæ, sed valde pilosæ, propter asperrinas hyemes exuperandas: vt sunt vrsi albi, vri nigri, alces alti, rangiferi proceri, lupi ferosæ, gulones voraces, lyncæ perspicaces, lutrae fallacæ, castores medicinales, damulæ pavidae, vulpeculæ astutaæ, nigrae, & albae, atque aliae alibi inusitatae naturæ, & nominis bestiæ, successivis capitis inferius per ordinem diligentius insinuandæ.

(There are many different kinds of animal spread across the globe, which are assigned their own spheres and allotted their own characteristics. Just as unequalled numbers of those without very thick hair, including elephants, camels, leopards, lions, ostriches, tigers, apes, and their like, swarm in hot countries, so also in cold regions you may find many beasts with dense fur because of the bitterly cold winters they have to overcome. Such are polar bears, black aurochs, tall elks, large reindeer, savage wolves, voracious gluttons, sharp-eyed lynxes, crafty otters, beavers useful in medicine, timid roe deer, cunning foxes, both black and white, and elsewhere other wild animals with uncommon natures and names which I shall introduce methodically in successive chapters below.)

1 All English translations of Olaus Magnus’s Historia de gentibus septentrionalibus are taken from the translation edited by Peter Foote. A Latin text is available for the original 1555 version published as an electronic version by Project Runeberg <http://runeberg.org/olmag>.

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When Olaus Magnus (1490–1557) introduced his two books on domestic and wild animals in the magisterial *Historia de gentibus septentrionalibus* (‘Description of the Peoples of the North’) from 1555, he did so in terms of biogeography, the study of the distribution of species in geographical space and time. He argued that different species exist in different places in the world and their bodies are best configured for living in those environments. Animals were perfectly adapted to specific climates and would flourish only there: ‘Sobrie tamen de vniuscujusque animantis genere, vbicunque vivat, est sentiendum: quia invariabilis naturæ lex ita statuit, vt nullibi melius, quam vbi productum sit, persistere possit’ (One must, however, prudently observe the habitat and nature of each breed, for an invariable law of Nature has laid it down that it can continue its existence nowhere better than the place where it was born).\(^2\) For example, if reindeer were taken to foreign countries, ‘ob cœli solique mutationem, aut insolitam escam ( nisi pastore consueto cibentur) non diu supersunt’ (they do not survive long, owing to the change of climate and soil, or, unless they are fed by their usual herdsman, to the unaccustomed food).\(^3\) Animals and geographies of the North were irrevocably linked for Olaus Magnus. Certain animals belonged there and only there.

One of the places in which we can witness the placing of animals in space is on maps. Wilma George argued in her seminal study *Animals and Maps* that the animals depicted on maps in the premodern era were placed in neither a fictitious nor haphazard fashion. Instead, the localization of animals was of interest to mapmakers ‘to stress the difference between various parts of the world rather than the similarities’.\(^4\)

Examining animal images on maps of Scandinavia, like the *Carta marina* made by Olaus Magnus in 1539, can expose how the North and its fauna were understood in the premodern era as distinct from the fauna of Continental Europe, as well as Africa and other distant lands. As Olaus Magnus writes: ‘Licet in Septentrionalibus terries plus, quam in alia orbis vlla regione, videntur asper-rima frigora prædominari: tamen innumerabilis ibidem etaim ignoti generis

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\(^2\) Olaus Magnus, *Historia de gentibus septentrionalibus*, bk xvii, Preface.

\(^3\) Olaus Magnus, *Historia de gentibus septentrionalibus*, bk xvii, chap. 27.

\(^4\) George, *Animals and Maps*, p. 25.
animalium reperitur’ (Although in northern lands more than any other region of the earth we see periods of bitter cold prevail, a countless throng of animals can be discovered there, including some species otherwise unknown). The northern animals belong in the North, and the North is characterized by them. I will argue that mapmakers chose animals to represent the essential character of the North in the illustrated premodern maps.

Interpreting Animals on Maps

The theoretical underpinning of this analysis of animals on premodern maps of the North comes from Denis Wood and John Fels’ work in *The Natures of Maps*. They argue that a map is a system of propositions, rather than a representation as has often been claimed. The fundamental cartographic proposition on a map is *this is there*, called a *posting* by Wood and Fels. The *posting* both locates *this* at a particular *there*, and tells the viewer that *there* consists of *this*. According to Wood and Fels, the *this is there* claim is a powerful proposition because it implies the ability to verify it physically: ‘you can go there and check it out’. Premodern maps even explicitly make *this is there* claims in their labels. The Latin phrase ‘Hic sunt’ (Here are) is a common way of beginning textual elements tied to imagery on the maps. The image and text are then bound to a specific geographical spot. Putting an animal on a map is then equivalent to the claim that *this* (an animal) is *there* (in Scandinavia, or even more specifically, in the far northern reaches of Scandinavia), as well as claiming that *there* (Scandinavia) is made of *these* (specific animals).

We can interpret the *this is there* proposition as a claim of belonging. Rather than being about only inclusion or exclusion, belonging is about fitting into an environment through sets of nested relationships. Belonging thus concerns the construction of biocultural relationships. When a map in this chapter posts an animal on a map of Scandinavia (*this is there*), the map is making a claim that the animal belongs to the North. The animal and the North are related, co-understood, and co-constructed.

Wood and Fels also develop the useful and insightful concept of *paramap*. The paramap contains the things surrounding the map which give the map

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5 Olaus Magnus, *Historia de gentibus septentrionalibus*, bk xviii, chap. 4. For an analysis of medieval perceptions of oceanic animals, see Szabó’s essay in this volume.

6 Wood and Fels, *The Natures of Maps*, p. xvi.

7 O’Gorman, ‘Belonging’, p. 284.
meaning. Paramap elements can be immediately adjacent to the map — the title, legend, paper, binding, inscriptions, notes, illustrations, and so forth — or elements that, while not physically attached to the map, surround the text socially to give it specific meaning, such as advertisements, lectures, and companion volumes.\(^8\) The entire context of viewing and reading the map depends on the paramap. Thus when discussing Olaus Magnus’s *Carta marina*, his *Historia de gentibus septentrionalibus*, as well as the commentary physically located on the map as an extended legend, has to be considered as paramap because it would have provided the context for reading the map.\(^9\)

In the premodern era there were of course various types of maps made for specific purposes, but the ones with animals tend to be decorative or instructional maps rather than practical ones. Medieval manuscript maps of the known world, called *mappaemundi*, sometimes indicated distinguishing features for various geographies around the world. Illustrations of and explanatory text about key cities, non-European peoples, and animals fill the largest of these maps, such as the well-known Ebstorf (c. 1235) and Hereford (c. 1300) maps. *Mappaemundi* functioned as pictorial historical chronicles as well as conveying Christian messages to be found in Creation.\(^10\) Monsters, those creatures thought to be amazing and exotic, and which often conveyed a Christian message or lesson, typically inhabit the edges of the map. According to Chet van Duzer, their placement on the edges sprung from ideas that monstrosity was a product of extreme climates and that monsters were located at the ends of the earth.\(^11\) The edge of the world is unknown and thus becomes known through the monsters on the maps. Scandinavia, as a place on the edge of the map in an extreme climate, would be ripe for inhabitation by the exotic and the rare with this view of the monstrous.

Building on the work of Wilma George, Wood and Fels argue that medieval *mappaemundi* transformed animals which had been previously located only in

\(^8\) Wood and Fels, *The Natures of Maps*, pp. 8–9.

\(^9\) This is particularly true in the case of *Historia de gentibus septentrionalibus*, which Olaus Magnus likely intended as an extended commentary companion to his map: Sjoholm, “‘Things to be Marveled at Rather than Examined’”, pp. 248–49.

\(^10\) See Woodward, ‘Medieval *Mappaemund*, for a full description of the genre and numerous visual examples.

\(^11\) Van Duzer, ‘*Hic sunt dracones*, p. 390. See also van Duzer, *Sea Monsters*, for examples of a specific monster type on the edges. We should note, however, that the monstrous is joined by the miraculous, such as Eden, in the outer extremes of the world, as discussed in Mittman, *Maps and Monsters*, chap. 3.
texts such as bestiaries into spatial realities. By being placed onto a map in a particular place, the animals gained locations and acquired neighbours, creating geographical faunal associations. ‘Posting the animals on the plane of the map made them more animal’, Woods and Fels argue. ‘It made them real’.12

Cartography in the fifteenth century shifted towards more detailed portolan charts which were useful in sea navigation. For this reason, most portolans show only the ports of call and sailing directions, rather than images of weird and wonderful things of the world. We see a proliferation of images of naval vessels on Renaissance maps in conjunction with European expansionist ideas.13 Some legendary features such as Prester John, the four rivers of paradise, and mythical islands continued to appear, but these were placed around the periphery or in the interior of continents.14 In a few cases, Nordic fauna was recorded on the map, probably because of its position on the edges and its similar legendary character.

In the sixteenth and seventeenth century, atlases, which showed regions of the world in more detail than the mappaemundi or portolan charts, became common. Because these maps zoom in on a region, they offered the opportunity for mapmakers to place animals even more discretely within regions.15 Instead of one image taking up a whole country, multiple images could be located across the region. By locating multiple images in the region, an associated biogeography was constructed.

Wood and Fels categorize maps of nature into eight types, each displaying a certain way of showing what nature, and by extension what the place of that nature, is.16 One of their types is ‘nature as cornucopia’, the category which encompasses a wide variety of maps featuring animal images, including medieval maps, modern children’s atlases, and popular science species distribution maps.17 Although Wood and Fels talk about this cornucopia as cuddly and charming,
the cornucopia of the medieval and early modern map is also about displaying the strange, mysterious, and dangerous, as this chapter will demonstrate.

**Claiming Northern Uniqueness**

While the North, particularly the arctic, does have some large animals that do not exist in more temperate climates, including the polar bear, arctic fox, and grey seal, many of the northern species also existed in premodern Continental Europe, including the brown bear, wolf, red fox, elk, beaver, and otter. On a given map, however, animals are rarely depicted more than once. Instead, they are localized and represent the essence of a place. The desire to identify northern animals as unique to northern latitudes goes back to at least Pliny the Elder, who has a chapter in his *Natural History* dedicated to animals of the north. Pliny names the European elk (*Alces alces*) and European bison (*Bison bonasus*) as being particular to northern climes, but these would not be animals that would come to represent Scandinavia in the cartography tradition.

On maps through the fifteenth century, polar bears represented Scandinavia. Polar bears (*Ursus maritimus*) live in the circumpolar Arctic, with their range limited by the southern extent of sea ice. While that makes them a northern species, in Europe they live only on the very northern-most edges of Norway and Russia where they have access to the sea. In spite of this very restricted habitation in Scandinavia, the polar bear is identified with the whole Norwegian peninsula on some medieval maps. The label for Norway includes declarations such as ‘Hic sunt ursi albi et multa animalia’ (Here are white bears and many animals) on Angellino de Dalorto’s portolan of 1325 and ‘moltes feres hi ha, ço és, cervos, orsos Blanchs e grifals’ (There are many beasts here, like deer, white bears, and gyrfalcons) on the 1375 Catalan Atlas. The inscription for Norway from Fra Mauro’s *Mappamundi* from around 1457 claims ‘Item qui se dice esser molte novità de animali maxime orsi bianchi grandissimi e de alter fere salvaçe’ (It is also said there are many new kinds of animals, espe-

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18 Schliebe and others, *Ursus maritimus*.

19 The IUCN/SSC Polar Bear Specialist Group has information on the polar bear, including distribution information; <http://pbsg.npolar.no> [accessed 20 September 2017].

20 Angellino de Dalorto’s map is available for detailed online viewing at the National Library of Australia <http://nla.gov.au/nla.obj-233481045/view> [accessed 20 September 2017]. The 1375 Catalan Atlas attributed to Abraham Cresques is Bibliothèque nationale de France, Département des manuscrits, Espagnol 30 and can be viewed online at <http://gallica.bnf.fr/ark:/12148/btv1b55002481n> [accessed 20 September 2017].
cially huge white bears and other savage animals). While Fra Mauro did not illustrate this caption, the earlier Hereford mappamundi shows a large white bear in the northern reaches of Finland. Mecia de Viladestes filled Norway on his Carte marine de l’océan Atlantique Nord-Est of 1413 with a white bear and a female deer(?), as well as three birds (Figure 9.1). These creatures take up the entire interior of the country, with the cities like Bergen and Trondheim on the outer rim. The Genoese map of 1457 (Figure 9.2) likewise has a deliberately extremely white polar bear labelled ‘Forma ursorum alborum’ in the Finland/Karelia region. These depictions of a polar bear may be indebted to Marco Polo, who when describing the Tartars of the Siberian Far North said that ‘you find in their country immense bears entirely white, and more than twenty palms in length’. Eventually the polar bear depictions moved closer to their correct locations: on Martin Behaim’s globe from 1492, the polar bear has moved up to the arctic where it is being targeted by an archer; on Carta marina (1539) two polar bears are found on sea ice off the coast of Iceland and another emerges from an Icelandic cave.

Although polar bears do belong in the North, they were not actually the right bear species to show inhabiting Scandinavia. That honour would go to the brown bear (Ursus arctos). The Borgia world map (Figure 9.3) from the first half of the fifteenth century, which exists as an original metal plate as well as later print copies based on the plate, shows a bear emerging from a den, as well as a falcon and reindeer rider in the Scandinavian peninsula. The bear, however, is not white as on other maps but rather speckled or lightly shaded in the printed copies. The texts around the bear declare that ‘extrema Norvegi(a)

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21 Fra Mauro, Mappamundi, Venice, Biblioteca nazionale Marciana. A detailed description of the map along with text transcriptions and translations available in Falchetta, Fra Mauro’s World Map.

22 See Chekin, ‘Mappae Mundi and Scandinavia’ for detailed images of the Hereford mappamundi.

23 Mecia de Viladestes, Carte marine de l’océan Atlantique Nord-Est, Paris, Bibliothèque nationale de France, GE AA-566 (RES).

24 Marco Polo, The Travels, 11, 479.

25 Behaim’s Erdapfel (1492), facs. by Ravenstein <http://collections.lib.uwm.edu/cdm/ref/collection/agdm/id/1224> [accessed 20 September 2017].

26 Apographon descriptionis orbis terrae (Borgia mappamundi), Vatican City, Biblioteca Apostolica Vaticana, Stampe.Geogr.S.128. For a discussion of the map and an English translation of all legends appearing on the map, see Nordenskiöld, An Account of a Copy from the 15th Century of A Map of the World.
Figure 9.1: The interior of Norway is filled with animals, while a native riding a reindeer enters Sweden from the margins. Detail from Mecia de Viladestes, *Carte marine de l’océan Atlantique Nord-Est*, Paris, Bibliothèque nationale de France, GE AA-566. Reproduced with permission.
e inhabilia nimio frigore’ (the extreme part of Norway is uninhabitable due to excessive cold) and ‘hic sunt ursi et falcones albi et consimilia’ (here there are bears, white falcons, and similar). This text has reassigned the colour adjective of ‘white’ from the bear to the bird. In the text, the mapmaker reinforces the placement of the bear in the Scandinavia peninsula as intention; it is ‘here’, in this place, that bears occur.

Bears — it is unclear whether they are supposed to be white or brown because all of the figures are line drawings — continue to show up in the Scandinavian Peninsula in seventeenth-century atlases. On Anders Bure’s Orbis arctoi nova et accurata delineatio of 1626, a bear runs through Lappland north of Tornéå; and on Johannes Janssonius’s Svecie, Norvegia, et Danie nova tabula of 1646, two bears roam in the mountains separating Norway and Sweden.

That the falcons in particular were identified as ‘white’ appears on other maps as well. The text accompanying a mid-fifteenth century map created by Claudius Clavus mentions that ‘white falcons are caught’ in Norway. Nansen, In Northern Mists, ii, 266.
Yet the problem remains that brown bears also occur throughout Continental Europe. They are not restricted to Scandinavia. On Olaus Magnus’s *Carta marina* a brown bear is drawn in Lithuania rather than Scandinavia. So while ten chapters of *Historia de gentibus septentrionalibus* are dedicated to the brown bear (one is about the polar bears in Iceland), the bear is not only Scandinavian. Olaus Magnus has a vague reference to the way that ‘de nigris, ac ferocibus vrsis’ (the fierce, black species of bear) is hunted ‘in Aquilonaribus regnis’ (in northern kingdoms) and tells an early medieval tale of a girl abducted and later impregnated by a bear in Sweden. 28 Primarily, he associates brown bears with Lithuania and Russia, which are ‘reperiuntur terræ cavernosæ infinitis apibus, & savis plenæ’ (dotted with caves that are full of innumerable bees and honeycombs). 29 Thus while acknowledging that the animal may exist in Scandinavia, Olaus Magnus assigned and drew the brown bear in another geography that he believed provided the most suitable habitat for the animal.

The polar bear, which represented Scandinavian fauna in the Middle Ages, was relocated on later maps to their more appropriate habitats. The brown bear, however, did not take its place as a dominant image because it was not unique enough. For that, mapmakers turned to the reindeer.

28 Olaus Magnus, *Historia de gentibus septentrionalibus*, bk xviii, chaps 25, 30, and 31.

29 Olaus Magnus, *Historia de gentibus septentrionalibus*, bk xviii, chap. 28. He also talks about Lithuanians and Russians capturing bears as performers in Chapter 32.
Reindeer (*Rangifer tarandus*) lives in circumpolar tundra and arctic habitats, including Scandinavia and northern Russia. The species was known in ancient zoological treatises as the tarandrus, which was a colour-changing animal in the Scythian north.\(^{30}\) In the medieval bestiary tradition, tarandrus or parandrus were stags with branching horns, cloven hoofs, and chameleon-like colour-changing abilities, but it was found in the south rather than north.\(^{31}\) Albertus Magnus writing in the thirteenth century identified an animal called *rangyfer* that lived in the arctic of Norway and Sweden and was similar to a deer but faster, more powerful, and with longer horns.\(^{32}\) Albertus’s rangyfer was clearly a reindeer, even though his version had three horns. Neither the tarandrus or rangyfer traditions mentioned the domestication or uses of reindeer, but Marco Polo wrote that Siberian peoples had ‘stags’ which functioned both like cattle and like horses to ride upon.\(^{33}\) Marco Polo’s description seems to have been influential in placing semi-domesticated reindeer in the North. The Borgia world map (Figure 9.3) shows a man riding a reindeer in the southern part of the Scandinavian Peninsula. The Sami (the indigenous inhabitants of Scandinavia who herd reindeer) hunting figure appears as a common trope on portolans, including Mecia de Viladestes’s *Carte marine de l’océan Atlantique Nord-Est* of 1413 (Figure 9.1).

Reindeer as the animal of the North hit a high mark in Olaus Magnus’s work (Figure 9.4). Olaus Magnus wrote that reindeer were geographically tied to the north: they were found in the northern areas of Eastern and Western Bothnia, which he labelled ‘enim extreme Aquilonis terræ’ (lands of the extreme north); when the animals were sent as gifts to nobles outside of Sweden, they died quickly.\(^{34}\) Reindeer were thus bound to the northern environment. The animals appear in numerous scenes of the *Carta marina* in Botnia and Lappland, including being milked, pulling wagons, and serving as cavalry. In addition to these domesticated reindeer, Olaus Magnus depicted wild reindeer crossing frozen lakes and discussed the wild type, which ‘vsibus humanis subdita mansuetudine fideliter inserviunt, vbi feræ naturæ reliqui in solitudine relicti augmento generis se sociant, vt interim venatione præmantur’ (being wild by

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\(^{30}\) Pliny the Elder, *Natural History*, ii, 304.

\(^{31}\) See, for example, the Aberdeen Bestiary’s entry for parandrus: <http://bestiary.ca/beasts/beast178.htm> [accessed 20 September 2017].

\(^{32}\) Albertus Magnus, *De animalibus*, ii, 1421 (bk xxii, tract II, chap. 1), ed. by Stadler.

\(^{33}\) Marco Polo, *The Travels*, i, chap. 56.

\(^{34}\) Olaus Magnus, *Historia de gentibus septentrionalibus*, bk xvii, chap. 26.
nature and allowed to remain in deserted places, herd together as their kind increases, and are sometimes pursued and hunted down). 35

Later maps continued highlighting reindeer as a wonderous and useful northern animal, including Liévin Algoet’s *Terrarum septentriolium exacta novissimaque description per Livinum Algoet* (1562), Antio Laferi’s copy of *Carta marina* (1572), and Anders Bure’s *Orbis arctoi nova et accurate delineatio* (1626). Reindeer, as an animal not found in Continental Europe in the medi-
eval or early modern period, was a natural wonder of the North. Its uniqueness from a Continental point of view put it on the northern map.

The wolverine (*Gulo gulo*) was likewise a uniquely northern species. Wolverines live in the boreal forests and tundra of the Nordic countries, Russia and Siberia. Olaus Magnus appears to have brought international attention for the first time to wolverines, ‘quaæ immani voracitate creduntur insatiablelia’ (whose enormous greed is believed to be insatiable) and live in northern

35 Olaus Magnus, *Historia de gentibus septentrionalibus*, bk xvii, chap. 28.
Sweden. The wolverines on Carta marina are described in the accompanying Opera breve as ‘animali uoraci, liquiali per nome Fitticio la chiamano gulonî, perche non intermetteno mai la loro uoracita se non quando i scaricano, ouer purgano il uentre stringendosi fra doi arbori’ (voracious animals, whose nickname is ‘gluttons’ [gulo], because their voracity lessens only when they empty themselves, or purge their stomachs by squeezing themselves between two tree trunks). On Algoet’s map from 1562, the wolverine is labelled as ‘Rassamaka animal insatiabus’ (rassamaka the insatiable animal) and is drawn squeezing between trees to defecate (Figure 9.5). Later authors like Conrad Gessner and Edward Topsell would cite Olaus Magnus’s description and image of the gulo in their catalogs of animals. Topsell tied the wolverine’s location in the North to the inhabitants of the North, saying that God placed it there ‘to express the abominable gluttony of the men of that Countrey’. Although the wolverine was a uniquely northern species, it failed to make frequent appearances on maps of the north, perhaps because it was too newly described.

36 Olaus Magnus, Historia de gentibus septentrionalibus, bk xviii, chap. 7.
37 Olaus Magnus, Opera breve, item B/G. English translation published in Ginsberg, Printed Maps of Scandinavia and the Arctic.
38 The name rassamaka is also attested by Topsell who says that in Lithuania and Russia, the animal is called ‘rossomokâl’: Topsell, History of Four-Footed Beasts, p. 205. Indeed, the wolverine in contemporary Russian is named rosomakha (pocomáxa).
39 Gessner, Icones animalium, p. 79; Topsell, History of Four-Footed Beasts, p. 205.
40 Topsell, History of Four-Footed Beasts, p. 205.
Mapmakers chose distinctly northern species — the polar bear, reindeer, and wolverine — as icons for the north, even though their knowledge of these species was far from perfect. The animals lived in the north as their only habitat, thus they belonged there and only there. The animals were unique to the north so they could uniquely represent North as a *this is there* proposition on the map.

*Where the Wild Things Are*

While the illustrated medieval maps tend to have illustrations that take up an entire country because of their scale (see, e.g. Figs 7.1 and 7.3), the atlases began to differentiate geographies within the Scandinavia region. The atlas style maps by Olaus Magnus, Algoet, Laferi, Bure, and Janssonius, as well as Sebastian Münster’s *Schonlandia* (1540), label subregions such as Bothnia, Laponia/Lappland, and Finmark to show distinctions within greater Scandinavia. Beginning with the work of Olaus Magnus, it was possible to associate animals with particular geographies within the region.

The animals on these atlases are conspicuously not randomly placed. They are instead restricted to the Far North, most often from Västerbotten (Sweden) and Österbotten (Finland) towards the pole. The southern parts of Scandinavia as well as the west coast of Norway are labelled with scores of towns, rivers, and mountain ranges. There are no animals there. While the immediate assumption might be that absence of animals in the south is attributed to a lack of space for the images, even open areas like mid-Sweden on Bure’s map are not populated by animals.41 The south, with the bigger cities like Uppsala where Olaus Magnus lived, is envisioned as the home of people. Olaus Magnus wrote that wild creatures live in unpopulated areas, a belief which is reflected on the maps.42 Wildlife is deliberately kept restricted to the Far North.

On the sixteenth- and seventeenth-century atlases, north of North becomes the cartographic home of many wild animals for the first time. Elk, lynxes, wolves, foxes, beavers, and otters all became inhabitants of the Far North, often along with the indigenous Sami population. These were animals that had historically been associated with southern regions, but were relocated on maps of

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41 Van Duzer claims that premodern mapmakers showed a general ‘discomfort at having open space’ which explains the placement of many monsters on the unknown edges: “Hic sunt dracones”, p. 398.

42 Olaus Magnus, *Historia de gentibus septentrionalibus*, bk xviii, chap. 1.
the north to the Far North in the areas far away from ‘civilization’. Yet none of these animals were in fact restricted to northern habitats—they were found in much of Continental Europe. In placing these animals in the North, a special case had to be made for their belongingness there.

The elk (*Alces alces*, known as the moose in North America) was an animal found in the north latitudes, but also in the Continental forests. While Pliny the Elder placed the animal on ‘the island of Scandinavia’, Olaus Magnus noted that many ancient authorities had located moose in Continental Europe — Caesar in Hercynian Forest, Solinus in Germany, and Hermolaus Barbarus in France. Olaus Magnus insisted that recent authorities were in agreement that ‘vt alces sint ab Aquilone, tanquam loco originis’ (the elk’s place of origin was the north) from which it spread out to other regions. On the *Ebstorf mappamundi* an elk appears in northern Russia, making it the earliest mapping

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43 Pliny the Elder, *Natural History*, ii, 263.
44 Olaus Magnus, *Historia de gentibus septentrionalibus*, bk XVIII, chap. 1.
depiction of the animal. Later, it would move to its Scandinavian home: Elk appear in a showdown with wolves in western Bothnia on Olaus Magnus’s map, and Andres Bure places one further north in Lappland (Figure 9.6). Elk, however, do not appear on many maps after Olaus Magnus, including Algoet and Janssonius, indicating that it was not seen as iconic to the North as the bears and reindeer which appeared everywhere.

A similar move happened with beavers. Pliny the Elder had said that beavers were located in Euxine, and other ancient and medieval scholars had seen beavers in Europe, including Gerald of Wales’s famous description of beavers on the River Teivi. Olaus Magnus included beavers on Carta marina in mid-Finland. Three animals are shown participating in a common beaver myth: they are working together to move branches for building a dam by laying the branches on one beaver who is on his back and then the other two pull him (Figure 9.7). Olaus Magnus understood that he had to justify the inclusion of the beaver on his map of the north. He did so by acknowledging their presence elsewhere but making a special case for their inhabitation of the north:

Etsi Solinus Ponticas aquas tantummodo inhabitare, & genus propagare æstimat castores: tamen in Rheno, Danubio, atque paludibus Moraviae reperitur id genus in copia magna. Sed salva hac opinione, divinae providentiae attribuendum est, quod maxima horum animalium abundantia est in Septentrionalibus aquis, eo quod quietiores sunt, quam Rheni, vel Danubii: vbi strepitus est, & incessabilis navigantium labor. In Aquilone infiniti fluvii sunt, & arbores aptissime, pro domibus ædificandis: quas & mira fabricant arte, docente magistra natura.

(Though Solinus thinks that beavers only live and breed in the waters of the Black Sea, this family may be found in large numbers on the Rhine and Danube, and in the Moravian marshes. Granting this, however, we must ascribe to divine providence the fact that a great throng of such creatures inhabits northern waters, inasmuch as these are more peaceful than those of the Rhine or Danube, where the commotion and incessant activity of boatmen prevail. In the North there are countless rivers, and trees which are ideally suitable as building material for the beavers’ homes.)

In this passage, the North was depicted as ideal habitat for the beaver. While it might appear elsewhere, the geography of the North made it belong there more than anywhere. Other mapmakers did not follow suit and place beavers

45 For a discussion of the Ebstorf mappamundi and a close-up image of the elk, see Kugler, ‘Die Ebstorfer Weltkarte’.
46 Pliny the Elder, Natural History, 11, 297.
47 Olaus Magnus, Historia de gentibus septentrionalibus, bk xviii, chap. 5.
on maps of northern Europe; rather, it became a staple of maps of northern North America, where beaver fur became a major trading commodity.

Otters appear on more northern maps than beavers, although they too are a widespread European species. Olaus Magnus included an otter on *Carta marina* in the region of Östrabothnia, Finland. The otter is shown bringing a fish to a man. In the Italian text which accompanied the map (*Opera breve*), Olaus Magnus explained the image as ‘l’animale Lutherus, common in Finland and Bothnia, & sometimes can be domesticated to bring fish to the kitchen’ (the animal Lutherus, common in Finland and Bothnia, which sometimes can be domesticated to bring fish to the kitchen).\(^48\) In *Historia de gentibus septentrionalibus* Olaus says

\(^{48}\) Olaus Magnus, *Opera breve*, item F/K. English translation published in Ginsberg, *Printed Maps of Scandinavia and the Arctic*. 
that otter domestication of this type was practised in Sweden in which ‘vt signo
dato per cocum, vadunt in piscinam, piscem magnitudine ab eo designate sus-
cipientes, rursumque alium & alium, donec sufficit imperatis satisfecisse’ (when a
cook gives the signal, they dive into a pool and catch a fish of the size he has indi-
cated, returning for another and yet another until his instructions have been com-
pletely satisfied). There is no earlier medieval literary tradition of this behaviour,
so it appears to be something which Olaus Magnus was recording for the first
time. Later cartographers copied the otter and fish image. Algoet’s Terrarum sep-
tentriolium has a similar image in almost the same geographical spot. Anders Bure
included an otter carrying a fish in its mouth (although there is no human master
to be seen) in Sweden north of Luleå on his map from 1626. In Olaus Magnus’s
text account, the otters are geographically situated: in northern waters, especially
those of Upper Sweden Hälsingland, Medelpad, Ångermanland, Jämtland, and
Eastern and Western Bothnia. To Olaus in the sixteenth century, the North of
North is where these animals belonged.

Wild animals on early modern maps of Scandinavia are posted in the Far
North, away from the populated areas except those inhabited by Sami. The bio-
cultural association claimed by the maps is that the North away from European
civilization is an ideal home for wild animals and wild men.

**Belonging in the North**

In the process of mapping the world during the late medieval and early modern
periods, animals played a key part in the *this is there* propositions of the maps
considered in this chapter. Animals were understood as belonging to specific
places, which in turn were defined by those animals being there. The medi-
eval and early modern maps that depict animals in the North present nature
as cornucopia, a sign of the wonders of God’s creation in lands on the edge of
European civilizations. Posting animals on these maps shows there are many
strange and exotic creatures inhabiting the North, as well as animals more
familiar to Continental readers of the maps. The maps pronounce that these
particular animals belong in the North. Their placement geographically con-

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49 Olaus Magnus, *Historia de gentibus septentrionalibus*, bk xviii, chap. 16.
50 Olaus Magnus, *Historia de gentibus septentrionalibus*, bk xviii, chap. 16.
51 Within this article, I have chosen not to discuss the characterization of the northern
indigenous people, the Sami, on these maps. For a summary of how Sami were depicted in early
modern literature, see Meriot, ‘The Saami Peoples’; for a more critical look at the Sami depic-
tions in Olaus Magnus, see Balzamo, ‘The Geopolitical Laplander’.
fers status and character. This belongingness is linked to the animal’s natural biogeography, that is, the climatic and vegetation zones where it lives, but it is also shaped by human arguments. Animals that were not exclusively northern could still be placed as northern emblems on maps if their ties to the North were explained. As the geography of Scandinavia became more detailed on maps, animals were relegated to the North of North as a wild zone.

The posting of animals on early modern maps were generally based on biogeographical reality, but the act of placing the animals also carried meaning. The narratives around the maps, both elements within the map proper and in the paramap, made claims about the North based on its fauna. The North was a wild and dangerous place with polar bears and wolverines, while at the same time it was domesticated and filled with useful animals such as reindeer and otters. Northern Nature’s cornucopia was a multifaceted gift from God of both wonder and utility.

The northern reaches of Europe provided challenging geographies and climates for animal and human alike in the premodern world, just as they do still today. The animals that persist in these challenges became examples for the mapmakers of the wonders of creation and the uniqueness of the North. Placing the creatures on the maps — making them belong in northern places more so than others — was, as Olaus Magnus put it so eloquently,

> ea potissimum causa, vt pius inspector agnoscant, quam admirabilis excessi creatoris affectus, & amor est in omnibus creaturis suis, vbiqve terrarum sua dispositioni subjectis, maxime in frigidissimo climate Septentrionalis plagiæ (concessa naturali sagacitate) conservandis: scilicet vt vndique conclusa nivibus, & gelu tellure, pastum prohibente, nedium vivere, sed & genus producere, atque alere possint, & inter asperrima elementa illææ manere. Sobrie tamen de vniuscujusque animantis genere, vbicunque vivat, est sentiendum: quia invariabilis naturæ lex ita statuit, vt nullibi melius, quam vbi productum sit, persistere possit.

> (principally to enable the pious reader to realize the marvellous tenderness and affection of our heavenly Creator for all His creatures, which are everywhere in the world subject to His direction, especially those which, with the natural shrewdness granted to them, must preserve themselves in the very cold climate of the northern region. In other words, when the ground is totally sealed off by snow and frost and grazing is impossible, they manage not only to survive but also to produce and feed young of their kind, remaining unharmed during the harshest weather. One must, however, prudently observe the habitat and nature of each breed, for an invariable law of Nature has laid it down that it can continue its existence nowhere better than the place where it was born).52

52 Olaus Magnus, *Historia de gentibus septentrionalibus*, bk XVII, Preface.
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