"Beating the Bounds": Switching Boundaries over Five Millennia

PAUL OLIVER

The area of Dartmoor in south-central Devon is today known as southwest England’s “last great wilderness.” Yet, as if to defy this categorization, this territory has known nearly four million years of human occupation. Today, to the trained eye, signs of human habitation, utilization and exploitation are everywhere. This article reviews the history of Dartmoor, particularly as conflicts over its possession and use have led to its being etched by boundaries. These boundaries, however, are not natural or self-evident; rather, they are a matter of perception. And through the years, as the land has served many purposes — commons, royal forest, private enclosure, mining site, military training ground, national park — these perceptions have had to be rehearsed to be properly remembered and passed down from one generation to the next.

One of the oldest customs in Britain is the “beating the bounds” of ancient parishes by priests or officers, who annually traced them with local youths or children to remind them of the limits of the parish in which they lived. In the past the youths were generally “switched,” or lightly beaten with a bundle of thin sticks or reeds, to make the occasion still more memorable. In some parishes it was even the custom to hold the male children by the ankles, or wrists and feet, and lower them till they made contact with the “bond-marks,” or boundary stones; few forgot the boundaries of their parishes after this experience.

The tradition of beating the bounds still persists on a seven-year cycle in some parishes, including Belstone and South Tawton on Dartmoor. After many centuries certain boundaries between these parishes are still disputed, notably on Cosdon, one of the highest and largest “downs,” or hills, on Dartmoor. At the “beating of the bounds,” a major boundary stone on Cosdon is a significant focus of the ritual, and it is here that young teenage boys are lowered in the manner described. The event, which is local and in no way directed to tourists (who are few in this part of the moor), was witnessed by children of the parishes the last time the bounds were beaten, in July 2000. They will follow the ritual seven years after, when they come of age.

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Of course, all this begs the question, “Where and what is Dartmoor?” Dartmoor is a region in south-central Devon, on the southwest peninsula of England (fig. 1). The third largest county in England, and considered by many to be the most beautiful, Devon lies between the Bristol and English Channels. Undulating moors occupy a considerable proportion of the land, including the “Lorna Doone” country of Exmoor to the northeast, and the “Hound of the Baskervilles” country of Dartmoor to the center and south. Dartmoor is often referred to as “the last great wilderness in southern England” and is generally characterized as a mass of igneous rock with thin grass cover. Though technically mountains, its bleak hills are not particularly high, rising only to 2,012 feet (650 meters). Some, called “downs,” have a broadly curved mass, but others, the dramatic “tors,” are crested by immense outcrops of granite.

Geologically, the bulk of the moorland is composed of a gray granite mass of a coarse grain which contains porphyritic feldspar, mica and quartz crystals, but intrusions of fine-grained “blue” granite and of black tourmaline are evident in exposed faces and in quarries. Around four hundred kinds of granite and related stones exist on the moors. The processes that took place during their formation and subsequent weathering through geological time led to immense deposits of kaolin at Lee Moor to the southwest, and lodes of tin elsewhere. Copper, lead, arsenic, iron and zinc, among other minerals, are also to be found, especially at the edge of the granite margin, where the approaches to the moorland plateau are steep. Though it is a part of the great granite vein which extends from Scandinavia through Scotland and Wales to Brittany and northern Portugal, it remains a singular region.

Covering nearly 370 square miles (approx. 1,000 sq.km.), the oval shape of Dartmoor embraces much more. Several rivers wind between the hills, most flowing south like the Dart and the Plym — though the Okement and the Taw flow north. From springs in the open moor, they meander through wooded valleys and over small waterfalls, becoming torrents following heavy rains. To the west of the moors is the river Tamar which acts as the boundary between Devon and Cornwall, while to the east is the Teign, which discharges into the sea at Teignmouth. In popular usage these define the outer limits of Dartmoor, but for many people the “real Dartmoor” is marked by the meeting of the outer fringes of the cultivated field systems with the open land and rolling landscape of the moors. Here may be seen the black-faced sheep and wild ponies which typify the “last great wilderness.”

In effect, “natural boundaries” provide convenient definitions of the limits of Dartmoor. But natural boundaries, though frequently cited, are largely perceptual. Thus, a river does not flow as a boundary, but as a unifying element which gathers its waters both from its source and from the valley slopes on either side of the course it takes to its outlet. Similarly, the ridge that links the peaks of some tors runs at the apex of the inclination on either side, the result of an upthrust in primordial time rather than the boundary of a terrain. Drawing the edge of a landscape or terrain is purely arbitrary, and rarely, if ever, does it express an ultimate truth. The difficulty of such a boundary determination applies even to the seacoast, which shifts with the tides, and is often additionally defined by such arbitrary devices as a “ten-mile limit,” or its equivalent, invented for the purposes of customs and excise, or to meet international agreements regarding the fishing industry. What is defined is a perception, based on the concept of a boundary, rather than a tangible reality.
While geography and geology help define Dartmoor, they do not explain what the “bounds” are, nor the “beating” of them. One must go back nearly eight hundred years to get a relatively clear picture of these, although there are important factors that are much older.

In the year 1216 King John of England — the signatory of the Magna Carta — declared central Dartmoor a “royal forest.” Most people assume a “forest” to be dense woodland and are puzzled by its application to the largely treeless moor. In fact, the word is derived from foris, which means “outside,” or “beyond the bounds” of cultivated land, and was applied to the “hunting forests” of the king. A dozen years later, despite John’s proclamation, Dartmoor was “disafforested” by King Henry III, who ordered a “perambulation” to redefine the forest and examine existing landholdings and commoner’s rights. Manorial lands had been granted in Saxon times — and after the Conquest, by the Normans, to 37 “knights.” But “commoners” also had title to portions of the area. Many were farmers, or “villains,” whose claims were of unknown pre-Norman origin (dating back “to times immemorial”), for which they paid a small fin venville, or nominal rent, to the Crown. Others were small-holders and “serfs” who had rights to “peccary” (fishing), “turbary” (digging turves or peat sods), grazing animals, or to collecting wood or surface stone.

Following Henry’s orders, twelve knights eventually made a perambulation of the bounds of the forest in 1240, which they surveyed on horseback and subsequently defined as, for example, “Hogam de Cosdonne,” “Parva Hundetorre,” “Thurlestone,” “Woreshoklakesfote,” “Heighstone,” “Langstone,” “Turbarium de Aalbersheved,” “Wallebroke,” and so on. These downs and tors are still identifiable as Cosdon Down (mentioned above), Little Hound Tor, Thurlston, Woodlakehead, Longstone, Walla Brook, etc., but in tracing them, the problem of recognizing any precise bounds becomes evident (fig. 2).

After the perambulation, Henry III gave the forest to his brother Richard, Duke of Cornwall. But Henry also declared it a “chase,” which meant that the rights were not exclusively those of the Crown. Subjects could own part of it, or have rights to its use, though as part of the Duchy of Cornwall, it reverted to the Crown at intervals under certain conditions. Today, this sector of the moor is still within the Duchy lands, under the demesne of the Prince of Wales.

**Figure 2.** Map of Dartmoor. The lands of the royal forest of the Duchy of Cornwall are shown, as are the military areas, Stannary towns, and some features mentioned in the text. Map by author and Alex Bridge.
Later perambulations in 1609 and the 1840s confirmed and reconfirmed the bounds, and found few encroachments by commoners. Indeed, it was in the interest of those with venville (villein’s) and commoner’s rights, to ensure that the bounds were respected. Commoners were, and are, farmers and pastoralists who shared land “in common” and did not — and still do not — define boundaries within the “commons.” Even today little on the ground indicates where the boundaries of the Duchy lands are, and they appear identical to the common lands. But at intervals one still does see “standing stones” like the one mentioned on the boundary between Belstone and South Zeal. Many such granite monoliths were placed following the perambulations. Others have initials carved into the stone indicating the limits of the ecclesiastical or civil parishes, which often are of earlier, (even Saxon) date, and do not necessarily correspond (fig. 3). Often, there are no other signs on the landscape of these boundaries. Nevertheless, it was important to know which lands were royal, which had to be maintained, which could be used for a fee, which could be taxed, and which parishes or users were responsible.

Of course, the very indeterminacy of such limits has at times led to conflict between neighboring parishes. Thus, in the instance already cited, the parishes of Belstone and South Tawton have always disputed the bounds on the upper slopes of Cosdon, and in the nineteenth century this even led to fighting between the parishioners.

By now it should be apparent why “beating the bounds” is a custom that is many centuries old. Following this practice, the parishioners, commoners, and those with venville rights could affirm their respect for the bounds while ensuring that their own rights were learned by the younger generations.

**RINGS AND REAVES**

If the eight centuries or more of commoner’s rights and royal forest seem a very long time for boundaries to be defined and respected, it is still a relatively short period in Dartmoor’s history of human occupation. The “last great wilderness” bears the evidence of more than four millennia of habitation, utilization and exploitation. But by no means all the evidence is of boundaries, although they are very significant where they can be seen: it is also of the utilization of its natural phenomena. On Dartmoor one can discover such information oneself, and make contributions to solving problems that continually engage archeologists. After viewing prehistoric sites in Europe and the Americas, it would be reasonable to expect modern boundaries, designed to protect the sites from being destroyed or plundered. But there are virtually none, and no signposts or on-site interpretation centers exist to condition how they are seen, experienced or comprehended.

Why the Dartmoor sites are so open to both casual visiting or scholarly examination is due in part to the considerable size and intractability of blocks of granite, which frequently can weigh several tons. The risk of removal, defacing or damage today is minimal, though in past centuries there was little awareness or respect for their historic importance. There is another factor which is frustrating to archeologists: the extreme acidity of the soils of Dartmoor breaks down wood and fabrics to the extent that troves of artifacts, weapons or jewelry are rare, and even the discovery of single items is uncommon. The durability of the granite has resulted in some of its uses surviving in the open landscape for thousands of years, though the tors have been subject to physical weathering by frost action since the Pleistocene period. One effect of such weathering is the partial collapse of some granite crests of the tors, causing boulders to slip and fall, which reduces the weight on the remaining granite mass and creates “stress release,” resulting in the lateral splitting of the rock into flat layers (fig. 4). Fallen boulders, some the size of a house and thousands more of lesser dimensions, are spread on the tor slopes as “clitter,” which provides rocks of sizes that can be manhandled and used for building.

The earliest signs of human presence on Dartmoor are the rock or earth-covered cairns termed “barrows.” Though many were destroyed by house-builders who wanted to make use of the stone, a number have been excavated. Chambers with ashes from cremations indicate their use, and imply developed social organization and systems of belief. Others have stone coffins called kistveans, with slab sides and massive granite slab tops, which date from the third millennium BCE. Of similar age are the stone circles, like the impressive Scorhill or the double circle of Grey Wethers, over thirty meters in diameter, which were almost certainly of religious importance (fig. 5). The oldest appear to have been multiple
rings, as at Shuggledown, Chagford, which has a kistvaen in the center of four concentric stone rings and three lines of double rows of stones in parallel that lead to it. This suggests that the rows defined processional routes to the burial place of a leader.8

Even if they were not edge boundaries, such markers indicate claims over the land that were intended to be permanent. While most of the grave sites have been plundered in the past, a number have been examined by archeologists who have found finely made flint arrowheads and shaft-hole battle-axe heads, which indicate the presence in Britain of the post-Neolithic Beaker People (named for their typical pottery) from southern Europe. Dating and ascription is difficult, and the purpose of the stone rows remains problematic. Some may be a mile or more in length and may be aligned to the setting sun of the midsummer solstice, as at Merrivale; others terminate with a marker stone.

These sites, which would have taken years to erect and required great coordination of manpower, clearly indicate social organization. But where did their builders live? While it is not always possible to identify the dwellings with specific religious sites, many traces of settlement exist. The best-known of these is Grims pound, a cluster of “hut-circles” or rings of stone slabs on the saddle between two tors, through which runs a stream. Each hut is around 12 feet in diameter, and several have stone sleeping platforms and hearths. In some cases the huts have curved sheltering walls to deflect the winds, and nearby are small “pounds” for animals. The whole of Grims pound settlement is embraced by a great boundary wall of stone, presumably defensive, with monoliths defining the entrance.9

At least two thousand hut circles have been identified on Dartmoor, and many are within stone enclosures, of which the largest is Riders Rings at an altitude of 1,200 ft. (366 m.). It protects 36 hut circles in a pear-shaped enclosure and various animal pounds or garden plots — the whole covering some 6 acres (2.4 hectares). Dating from the early to middle Bronze Age, the huts were small and probably had conical roofs covered with turf or thatch, as no traces of stone roofing have been found. By the late second millennium BCE larger hut circles were raised, such as the grand examples that are generally hidden by the Fernworthy Reservoir, built in the 1940s. Fortunately (for the archeologist), these are exposed when the water level drops in drought conditions, as it did in the summer of 2003. Others, ten meters or more across, are at Foale’s Arrishes, which are almost hidden by bracken fern for much of the year, but which reveal parallel boundary walls when the bracken dies back in the winter.10

By the middle of the second millennium BCE field systems to the east of the moors were already being established, with grids of boundaries overlying or accommodating earlier curvilinear shapes. On Mountsland Common the largest pre-
historical field system in Britain, extending to more than 3,000 hectares, employed “parallel reaves,” or walls of stone cleared from the fields and covered with turves. Such reaves, which defined the limits of a farm, were also used as boundaries to larger territories. To view these definitions of terrain and space today can involve penetration into the lesser-known parts of the moor. And even then, good light, a sharp eye, and strenuous walking may be required to trace them (Refer to Fig. 3).

At Mountsland Common a Bronze Age axe-head was found which was of Central European type, affirming that the remarkable pan-European trading links extended to Dartmoor settlements. Bronze artifacts were imported, for at only one site, Dean Moor, have hints of prehistoric tin smelting been found. By Kes Tor is a late prehistoric field system with rows of parallel stone boundary walls, below which is an impressive site of hut circles made of large stone slabs. Known as “Roundy Pound,” this was once believed to have been a Bronze Age tribal chief’s compound. But excavations in the mid-1950s revealed that the main hut had contained an iron smelting furnace, a forging pit, and piles of slag. Probably a unique example of reuse, the forge dates from around 500 BC, heralding the Iron Age; no other evidence of Iron Age settlement or use of the inner Moor has been located.

Following these times, a dramatic decline in the climate of the region made the moorlands virtually unoccupiable for some eight centuries, although Celts may have attempted settlement around their periphery. As many as twenty hill-forts, with inner enclosures and defensive ringed boundaries or ramparts, such as Cranbrook Castle at Moretonhampstead, were erected during the period, at an average of four-mile intervals, encircling the moor. This suggests a systematic defensive system; but today these structures are heavily overgrown, and have not been excavated, even though sling shots have been found. Such forts may have been abandoned with the coming of the Romans, who established a legion of five thousand men at Exeter. Apart from driving a road through it, the Romans made no use of Dartmoor. But with their departure and a marked improvement in the climate, it was gradually reoccupied.

RETURN TO THE TORS

Saxon invaders from North Germany in the second half of the seventh century AD penetrated Devon and Cornwall, some settling on Dartmoor. Unlike Cornwall west of the Tamar, however, there are few surviving Celtic place names on the moors, with the exception of the names of rivers. Some local names do indicate a measure of Saxon settlement and cultivation; however, this is thought to have only encompassed scattered farms and a few villages. Since Saxon farms were built of wattles and covered with turves, little remains today beyond the hard “pans” of the floors for archeologists to use to identify their former sites.

If such scattered dwelling sites have been located by some and questioned by others, there is no doubt as to the wailing of the town of Lydford, situated on the western fringe of the moors, in the ninth century by King Alfred the Great. Possibly Celtic in origin, Lydford was further developed as a defensive frontier post against Danish raids. Here, the steep-sided Lydford Gorge formed a natural barrier, and a town of some twenty acres was eventually encircled by a ditch before a wall of turves faced with granite.

In 997 AD, a hundred years after the death of King Alfred, the Danes destroyed the Benedictine Abbey of Tavistock and attacked Lydford. Though damage was inflicted, the walls repelled the Danes on this occasion. Today, a long stretch of the wall and the Saxon grid pattern of streets can still be seen in what is now a village. The town was important enough to issue its own coinage made from local tin. But hundreds of examples are in Danish museums, evidence of the eventual dominance of the Danes, and payment of danegeld, or tribute money, to the invaders.

Lydford, in whose parish the royal forest was situated, also became a major religious center, and people from many parts of the moors were required to worship there. Others worshipped at the “Cathedral i’ the Moors,” at Widecombe. To direct them, a number of granite crosses were erected which acted as waymarkers. Some were reused by farmers, but many are still standing, like the forest bond-marks and prehistoric menhirs which still help people locate themselves when they are lost in the unpredictable fogs and clouds that can engulf the moorlands.

Dartmoor offered pasture for the livestock of farmers from most parts of Devon, who paid a minute sum for each grazing animal, provided that they were “depastured” at night. Commoners overcame this problem by building “pounds” or “folds,” large circular enclosures where animals could be enclosed. These were also used to retain herds during the “drifts” or big census drives, in which all commoners were obliged to take part.

Settlement on the moor was not discouraged, and excavations in the 1960s and 70s revealed early groups of stone farm buildings dating from the twelfth century AD (Fig. 7). The hamlet of Houndtor Vale, on a saddle site between tors, reveals the origins of the Devon longhouse. This type, which was built for more than four centuries, consisted of a farm building on an incline, with a domestic “livier” at the upper end, and a “shippen,” or cow byre with a drainage channel, below. A crossassage served both parts, which were ranged in line under one roof. The Hound Tor complex consisted of eight longhouses, three barns and three corn-drying kilns — the land, including the nearby stream and fields, being enclosed by a wall. Built of granite blocks and often with roofs raised on great timber cruck frames, the Dartmoor longhouses are an impressive vernacular tradition. Health legislation in the 1920s, however, forbade the sharing of the same building by people and farm animals, so many long-
house owners converted the shippens into extra domestic accommodation (fig. 8). Many still stand — especially in Widecombe parish — including a small number with shippens in their original condition.15

Arable land in the higher moorland is limited, and it is the lower slopes and more fertile border lands that are cultivated today. Before and after the Norman Conquest in the eleventh century agriculture was undertaken by solitary farmers who surrounded their farms with irregular fields. In the fourteenth century the “open-field” system was adopted, using enclosures, strip farming, and subdivision of the fields by mutual agreement. The Duchy rent-collectors assessed a “ferling,” or about 32 acres, as sufficient to support a farmer and his family. The regularizing of measurement was also reflected in the length of the “furlong,” the 220-yard furrow ploughed by an ox-team. On the hill slopes the land was stepped by plowing along the contours against banks which contained the soil, called “lynchets,” as on Challacombe Down, where the turn-rows for the oxen can still be discerned. The ferlings of the open fields and the parallel lynchets of the slopes were defined by field boundaries, built of free-stone, or granite clutter cleared from the land to be cultivated. An entire area cultivated by peasants working for a landed “copy-holder” would be contained by a “ha-ha,” or bank-and-ditch boundary, which deterred the royal deer from entering the tenement.16

Those farmers who had “ancient tenements,” or lands over which they had rights that dated back before the perambulation of the forest, and who wished to cultivate more lands, were entitled to build walls around “newtakes” or previously unenclosed fields up to eight acres in extent, if they could use the land productively. Taking more land than was officially permitted was by no means uncommon, the most notorious case being that of Nicholas Slanning who appropriated thousands of acres in the mid-sixteenth century before being discovered. However, the Duchy itself was not innocent in this respect, both royalty and commoners gaining or losing by the vagueness of the forest bounds. In fact, rental fees from the land and from dues for summer grazing eventually became so small (£25 per annum) that their collection by the Duchy lapsed: there was far more to be gained from industry.17

DIGGING DARTMOOR

By the eleventh century, tin had been discovered on the moor and was being regularly mined and worked. Open-cast mines were mainly used in the early years of the industry, the exposed streams of black cinders being traced back to the lodes. Where necessary, trenches were made to reach them, but shaft-mines were not dug. Though the precise origin of the rights of the tinners is not known, they were recognized and protected by the Crown when the forest bounds were defined. Tinners were permitted to continue extracting ore, pulverizing it, smelting the tin, and exporting ingots — the taxes paid on the product making a substantial contribution to the royal purse. As there was no coal on Dartmoor, a support industry of peat-digging to provide fuel developed, and water power was also extensively used. For a couple of centuries Dartmoor’s production of tin became the major source of the sought-after metal in Europe. But production was carefully regulated: the metal had to be assayed, taxes paid, and strict rules of extraction, processing and marketing enforced.

Tinners also had special rights, and the large settlements of Tavistock, Ashburton and Chagford were declared “Stannary towns” for the assaying of tin and collection of taxes. They were permitted to establish their own Parliament, which met twice a year on Crockern Tor until the end of the eighteenth century. They also had their own courts, and defaulters were incarcerated in the formidable cubic stone prison known today as Lydford Castle.18

![Figure 7](image1.png)

**Figure 7.** One of the medieval house sites at Houndtor Vale, showing the cross passage, and at the left, the shippen for cattle.

![Figure 8](image2.png)

**Figure 8.** Sanders, a Dartmoor longhouse at Lettaford, near Chagford. The “livier,” or domestic end, is on higher ground than the “shippen.”
Tin extraction was highly lucrative, with an annual average of two hundred tons of tin being produced in the first half of the sixteenth century. This brought considerable income to the Crown. Within fifty years some tinners were also able to buy their freedom from taxation. One indication of the former scale of the industry is today provided by the remnants of artificial watercourses, or “leats,” which were dug across the moor. These channeled continual streams of water for cleaning the tin, and in the fourteenth century they also provided water power to operate multiple hammers to pulverize the ore, and to pump bellows to keep the smelting furnaces roaring. Only fragmentary remains of the industry are to be seen today, but tinners’ leats, some of which were several miles long and also functioned as boundaries, still flow across the moors (fig. 9). Many have medieval “clapper bridges” made of great granite slabs, which facilitated movement. Tinners also built reaves to further define their workings — complicating the identification of moorland boundaries. However, by the late seventeenth century tin mining declined on the moor, largely because of the competition of cheap tin mined in Malaysia.

Agriculture in general in Britain had deteriorated by this time, and in the eighteenth century many of the commoners lost their lands, as enclosure acts allowed wealthy landlords to bring modern methods of cultivation to the unworked commons. Already the Duchy had begun to lose interest in the forest, and for some forty years in the mid-eighteenth century supervision was withdrawn, and land grants were given to favored recipients, usually knights of adjacent manorial estates, who began to enclose them. During this period of lax administration, the Prince of Wales granted more than 14,000 acres of the commons on long leases, and more than 5,000 acres of newtakes were also approved. By contrast, the ancient tenements represented less than 3,000 acres. But many landlords, with serious plans for development, had no knowledge of the peculiarities of Dartmoor soils, and so their “improvements” often failed. Finally, a bill was drafted which, if it had passed Parliament, would have divested the Duchy of its forest entirely in favor of those who sought to exploit the moors. Fortunately, advisors to the Duchy successfully demonstrated that, by so doing, the venville and some commoner’s rights would have been breached.

No enclosure act included the Dartmoor commons, but encroachments on both the Duchy and common lands continued, often by the deliberate misreading or exploitation of the ambiguities of the forest boundaries as defined by the perambulations. One landholder, hoping to add many acres to his land, even renamed a hill “Little Hound Tor” and had granite blocks moved to the crest to make it appear convincing. Yet, already, large areas of the moor had been appropriated. For example, two of the gentry illegally enclosed 3,000 acres of common land in the center. And an Irish beneficiary brought a team of barefooted laborers to build a wall to enclose a part of the western moor, south of Okehampton. The men of Belstone, however, waited until the laborers had built the structure, and then tore it down; today, the remains of the “Irishman’s Wall” are still to be seen on Belstone Tor. When the commoners of Gidleigh found that their lands were being enclosed illegally they, too, destroyed the boundary wall. However, a new one was raised with less encroachment, and new initials were carved on invented bond-marks to give it apparent authenticity.

Most leases or encroachments were of lands intended for agriculture, but some of the lands gained by these and more legal means were obtained with a view to exploiting other resources. While there was a brief revival of tin mining in the early nineteenth century with the introduction of tin plate manufacture, the Stannery towns lost their power and their Parliament. At the same time, lead extraction developed, with Wheal Betsy and other such mines coming into operation from the 1790s. Different minerals, including manganese, arsenic and tungsten, were also obtained, and copper mines were worked for well over a century. A total of 70,000 tons of copper ore were taken from the Marytavy, Belstone and Ramsley mines on the moorland fringes. Other industries have been more recent, and also more striking, in their impact — notably the quarrying of granite and the extraction of china clay.

Though Dartmoor stone has been extensively used for millennia, the material has only been quarried since the early nineteenth century. So abundant was the clitter that the opening of quarries was hardly necessary until its large-scale use — for example, for the building of the British Museum in London, or for the edging of pavements (sidewalks) in Victorian towns — made it commercially viable. From Hay Tor quarry a tramway was constructed to ship out the stone, with the rails, and even the points, being worked in granite (fig. 10). Massive rocks were split, and from the debris enclosing walls were constructed using large stones. These
into a National Park was intended to ensure.24

Fences that defy the freedom that the making of Dartmoor Around the pits are warning notices hung on the high steel engulfed by the industry, though access to them is restricted. given to a few of the many archeological sites that have been

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extensive quarries closed a century ago, but those at Meldon and Merrivale continued working until recently, their impregnable rock boundaries still remaining.23

By far the largest and most lucrative industry on the Moor today is that of kaolin, or china clay, which has been extracted from pits to the southwest since the 1830s. Such pits are devastating to the landscape, with the Lee Moor pit alone extending to more than 100 acres and being some 300 feet in depth. Immense clay dumps rival the tors in size, for the pits can produce up to a half a million tons of china clay of the highest grade in a year, and generate some four million tons of waste in the process. Three-quarters of the production is exported, with the clay being used for many purposes, from porcelain to paint, plastics to paper filler. As such, clay mining is both lucrative and land consuming. Two companies relinquished their permissions to work Blackabrook Valley and Shaugh Park in 2001. Only with the most strenuous efforts was some measure of protection given to a few of the many archeological sites that have been engulfed by the industry, though access to them is restricted. Around the pits are warning notices hung on the high steel fences that defy the freedom that the making of Dartmoor into a National Park was intended to ensure.24

PARK, PROBLEMS AND PERCEPTS

Too numerous to detail, or even to list, are other present-day uses of various parts of the moor. Of these, military training is among the most evident, having been introduced at the time of the Napoleonic and Crimean wars and having grown to large-scale maneuvers by 1873. An annual camp was established in the Okehampton sector, and in 1895 the Duchy granted a license to the War Office to build a permanent camp and to use the northwest quarter of the moor, when required, as a training and firing zone. The agreement continued until the end of World War II when half of Dartmoor was used for these purposes, with inevitable damage to some sites. A demand to increase the ranges after the war to more than 70,000 acres, of which the public would be admitted to only 20,000, was rigorously opposed. Today, the army still trains on some 40,000 acres in four ranges, with stated boundaries marked only by occasional flags. With fewer visitors in this area the army has, in some respects, contributed to its conservation, but military use is still inimical to the moors’ existence as a public amenity.25

In the face of growing exploitation, the Dartmoor Preservation Association was founded in 1883, and soon after, it recommended preservation of the moor as a National Park on the American model. More than half a century was to pass before this became a reality, in 1951. In the meantime there were many intrusions, including the afforestation of open moorland, which was mainly undertaken after World War II. The planting of conifer forests at Fernworthy and Bellever, apart from being inappropriate, also resulted in the smothering of archeologically significant stone rows and circles, creating forest boundaries that bore no relation to the past. Much of the planting was privately owned, encouraged with government grants. But these were not the only violations of the National Park status: more permanent and irreversible has been the building of dams to create reservoirs that could supply Devon’s coastal towns.26 It may be noted that some of the towns close to Dartmoor were embraced in the National Park’s own boundaries, which extend beyond the moors in places, and these too, require water supply.

As early as 1591 Sir Francis Drake built a leat to supply fresh water to the ancient port of Plymouth. This served the town until a dam was built and a reservoir engulfed several farms and over a hundred acres of land. Enlarged in 1928, the dam and reservoir now provide Plymouth daily with ten million gallons of water. Other reservoirs have also been built to supply the towns of Torquay and Paignton, the former securing rights to create the Fernworthy Reservoir already mentioned, begun in 1934 but completed in 1942. Fortunately, grandiose plans to build reservoirs for eight hydroelectric plants were defeated. But approval was given for the Avon dam a year before National Park status was granted. Plans to make a reservoir at Taw Marsh were countered in 1957 by permitting the boring of wells and the building of a semi-underground pumping station. A bigger intrusion in the Park was the building of the Meldon Dam as recently as 1970 (FIG. 11). Parliament gave its overriding approval to this project, despite the objections of conservation bodies, the Park authorities, and even of the Duchy.27

Too numerous to detail, even to list, are the many other uses to which Dartmoor has been subjected. Captives from the Napoleonic wars were incarcerated in the purpose-built and still functioning Dartmoor prison; explosives were made in powder mills near Bellever; and ice was made and stored on Sourton Down. All the examples that have been discussed,
and many more, emphasize the need to defend Dartmoor from further exploitation. While this awareness has led to the founding of the National Park, park status has not offered total protection. For example, still greater problems arose when a bypass around the town of Okehampton was constructed within the Park’s limits in the 1970s, even though a number of alternative routes had been proposed. Now the bypass itself is effectively the northwest boundary of Dartmoor.28

It would be facile to attempt to define the nature of boundary from the Dartmoor example. On the contrary, a remarkable, even unique, aggregation of circumstances and conditions make Dartmoor a palimpsest of human occupation, beliefs and symbols, enterprise and utilization, ownership and inheritance, rights and obligations, exploitation and evasion, claims and justice, cooperation and tension, industry and recreation, worth and waste, and much, much more, over five millennia. As such, it bears the evidence of the multiple switching of land demarcation, division and boundary definition, and reveals the diversity of interests and the complexities of occupation. While we may challenge past boundaries, our redefinition may be as lasting or as transitory as any on the moor. So we are confronted with the question as to whether the natural limits of Dartmoor are the only “boundaries” that have any significance throughout.

From the conception of limits arises the percept of the edge or limit of a terrain, and this in turn may be culturally regarded as a “boundary.” It is the core of my argument here that all boundaries may be traced back from the cultural expression, whether it be wall or wire, to the percept of limitation, and ultimately to the concept that inspires it. When and wherever the “beating of the bounds” takes place, as in Bovey Tracey in 2004, it is the perception that is being awoken, the concept that is being inculcated; the physical boundary remains nonexistent. The evidence of Dartmoor affirms that while, literally or metaphorically, the land bears the scars on its surface, ultimately, those who seek to define its bounds will always be “beaten.”

**REFERENCE NOTES**

5. Ibid., pp.27–29.


17. Ibid., pp.154–57.


23. Ibid., “Industries from Granite,” pp.70–86.


All images are by the author, except where otherwise noted.