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### Hay Barracks in Newfoundland

Hay barracks are a vanished piece of Newfoundland's history, a very specific type of vernacular agricultural architecture that is no longer seen in the cultivated fields of the province. Like other aspects of vernacular agricultural outbuildings such as root cellars, equipment sheds or animal pens, hay barracks have rarely been seen as "historic" properties in their own right. In Canada, outbuildings have been protected generally where they exist as part of an historic cluster.

One small-scale example of this can be seen in the Shano/Le Shane Property Registered Heritage Structure, Lower Island Cove, Newfoundland, designated as a Registered Heritage Structure by the Heritage Foundation of Newfoundland and Labrador in 2006. In addition to the main house, the designation includes a root cellar, well house, shed and outhouse (Canada's Historic Places 2014b). Another larger scale example is the Duke of Sutherland Site Complex, Brooks, Alberta,

**Fig. 1**  
*Hay barrack in field.*  
(The Rooms Provincial Archives Division, VA 6-6 / Betty W. Brooks and Stanley Truman Brooks [between 1934 and 1938], Newfoundland Tourist Development Board photograph collection.)



designated a Provincial Historic Resource by the Province of Alberta in 2000. The designation includes the historic farm estate, but also traces of the irrigation ditches, a generator building, an outhouse, a barn and a pump house (Canada's Historic Places 2014a).

Rarely, however, are vernacular outbuildings considered worthy of such official recognition, though collectively they are an incredible (and rapidly vanishing) resource. Buildings like this are invaluable in how they demonstrate the link between built heritage and our intangible cultural heritage. Simple working buildings provide a focal point for the study of how traditional and informal knowledge is passed along, adapted and sometimes abandoned as culture and society shifts. This research note takes one example of a vernacular structure, the hay barrack, and shows how it can be a stepping stone for research on local agricultural traditions. It is an attempt to present what is known about hay barracks in Newfoundland; to give a sense of their origin, history, diffusion and use; and to document their decline and eventual disappearance from the cultural landscape of the province.

### What is a Hay Barrack?

The *Dictionary of Newfoundland English* defines a hay barrack as a "structure consisting of four posts and a movable roof, designed to protect hay from rain and snow" (see, as an example, Fig. 1; Story 1990). It goes on to note that such a structure

is composed of a square base of criss-crossed poles, to keep the hay from the ground, and at each corner a large upright pole. In each pole there are holes through which a large bolt can be passed. Resting on four large bolts, one in each pole, is a four-faced cone-shaped roof. These barracks are usually boarded in for about four feet [1.2 metres] from the ground.

"There's a lot of people don't know what a hay barrack is," reminisced Goulds-area farmer Leonard Ruby, as part of the Heritage Foundation of Newfoundland and Labrador's Seeds to Supper Folklife Festival in 2011:

I don't know if they were used anywhere but the idea was brought over from the old country. Holland they say they originated. But you had those hay barracks in your fields and it made a lot less work. You could bring in the hay and

stack it until you'd use it in the winter—move it from the hay barracks to the barns—and it kept in perfect condition if you ... just had the knowledge of what to do.... They were pretty simple: four poles in the air with a pyramid shaped cover. You rose up this cover and as you filled it with hay you let it down, let it down, and the hay compressed and then you trimmed the outside, which sort of sheds water, any moisture, and the hay would be good in probably five or ten years. (Ruby 2011)

Leonard Ruby's description of a basic hay barrack is fairly representative of those found in Newfoundland and elsewhere. Usually constructed with four (sometimes five) poles, with a roof that raised and lowered, hay barracks saw some local and regional variations depending upon the whims, needs and construction skills of the farmers and labourers who created them.

While the number of poles could vary, the defining feature of the barrack was its movable roof:

Once a common sight in the Hudson Valley, farmers in New England and Pennsylvania also built hay barracks. Usually the support poles, which were drilled with holes at regular intervals, extended through the roof. Because the roof only rested on a set of removable wooden pegs, it could then be raised or lowered to accommodate the height of the stack with the aid of a ratcheting jack. The support pegs were then replaced at the required level. (Vlach 2003: 113)

A letter dated November 13, 1787, and written by Mrs. Mary Capner from Hunterdon County, New Jersey, to relatives in England, includes this descriptive note about hay barracks:

**Fig. 2**  
A ca. 1930s four-pole hooiberg at Emnesserweg, Blaricum, Netherlands. (Photo courtesy Gerard Grootveld.)



Barracks are a building I have not described to you, tho I noticed them at the first coming into the country. Tommy has made one for his Bro. [It has] four poles fixed in the ground at the distance of fifteen feet [4.6 metres] in square. The poles are squared fifteen feet [4.6 metres] or more at top and five feet [1.5 metres] at bottom unsquared. This is all above ground. In the square part of the poles there are holes bored thro at the distance of twelve inches [30 cm] big enough for a strong iron pin to be put thro to suport [*sic*] four wall plates which are tennanted [*sic*] at the ends, then some light spars are put upon the wall plates and thatch upon them. When it was only five feet [1.5 metres] from the ground, the room can be raised at pleasure 21 feet [6.4 metres] or any distance from the ground between that and five feet [1.5 metres]. These are to put hay or any kind of grain under and the roof is always ready to shelter from hasty rains which is common hear [*sic*] in summer. Those that only have two cows have the bottom part boarded at the sides and a floor laid over and the hay at top and the cow stable under. (Qtd. in Shoemaker 1958: 4).

## Origins of the Hay Barrack

St. John's farmer Leonard Ruby's assertion that the hay barrack originated in Holland may be correct. In the Netherlands, the structure was primarily known as a *hooiberg*, or hay mountain (Fig. 2), though many other regional names exist (Noble 1985: 107, 111). Some of the earliest archaeological examples, with three and five posts, were excavated as part of a late Bronze Age farm at Zwolle-Ittersumerbroek, Netherlands (Zimmerman 1992: 37). Noble notes that

hay barracks have been employed in the Netherlands for a very long time. Deeds from the late 13th century mention bergs but without any description. Flemish painters frequently incorporated hay barracks in rural scenes from the 15th century onwards. (1985: 108)

Rembrandt even made an etching of one in 1650. *Hooiberg*-like structures spread throughout the Netherlands and beyond, even as far as the Ukraine, possibly introduced by Dutch or German Mennonites (Noble 1985: 114). Local historian Gerard Grootveld has documented a

**Fig. 3**  
Four-pole hooiberg with pulleys at Franschepad, Blaricum, Netherlands. (Photo courtesy Gerard Grootveld.)





number of *hooiberg* structures in and around the community of Blaricum, Netherlands, including three-pole, four-pole and five-pole variants (see Fig. 3).

In Flanders, there are numerous terms to describe similar hay storage structures. Hilde Schoefs, conservator at the Domein Bokrijk Open Air Museum, notes,

The word *hooimijt* [see Fig.4] is both similar to *hooiberg* (literal translation: hay mountain) as well as different from it: *hooimijt* is more common in Flemish than in Dutch; a *hooiberg* denotes in Flanders rather a large heap of hay, while a *hooimijt* designates a somehow more limited amount of hay/straw/grains, arranged/stacked in a practical and conical way, sometimes around a wooden pole; and a *hooiberg* in Holland denotes different regional varieties of a wooden pole structure meant to stack hay.... The meaning and use of both words is not that straightforward, I am afraid. Apart from that there are more words competing for parts of the same meaning, for eg. *hooistapel* (literal translation: staple of hay) which is still a common word, but also the more archaic *hooischelf*. In the local dialects there are even more words for more or less the same idea—"a heap of hay"—to be reaped, but that is another story. (Hilde Schoefs, personal communication, January 6, 2014)<sup>1</sup>

By 1698, at a time when the use of similar structures in the British Isles may have already been in decline (Airs 1983: 51), Dutch pioneers were headed west across the Atlantic. The Dutch introduced hay barracks to New Jersey in the late 17th and early 18th centuries (Wacker 1973: 36). By 1730, Dutch hay barracks had been adopted by other ethnic groups in New Jersey (Wacker 1973: 41), and the technology soon spread. In the Pennsylvania Dutch area, the local term *shutt-sheier* has been documented as early as 1756 (Shoemaker 1958: 3). From there, the humble hay barrack spread to Massachusetts, Virginia, Maryland, Ohio, Iowa, Illinois, Wisconsin, New York, Rhode Island, Prince Edward Island, and southeastern Manitoba (Noble and Cleek 1995: 162). Hay barracks also spread to certain areas of Kansas, perhaps introduced by Mennonite and German Catholic farmers (Hoy 1990: 117).

In Newfoundland, the term for such structures was most often "hay barrack" though the same roofed structure was sometimes called a "stack" in the Codroy Valley. The term "barrack"

varied in other regions: "No shed owner in Kansas that I have talked to has ever heard the term 'hay barrack'" writes Hoy (1990: 117). Instead, Kansas farmers predominantly used the term "hay roof," though some used "hay shed," "pole shed," "alfalfa shed" or "hay cover." Farmer John Lies of Andale, Kansas, referred to his hay barrack as the "lily pad"—"because it floats up and down and because it is cool" (Hoy 1990: 121). In the British Islands, similar structures were known as "helms" (Zimmerman 1992: 34) but were also possibly known as "hovels" (see Airs 1983; Dyer 1984) or "belfrys" (see Needham 1984), and, in one English 17th-century nod to possible origins, a "Dutch barne" (Airs 1983: 51). The phrase "Dutch barn" continues in the British farming tradition, to refer to a barn with a roof and open sides, sometimes called a pole barn, though generally with a fixed roof.

### Advantages of the Hay Barrack

It has been argued that the popularity of the structure was probably due to the fact that a barrack could be built "quickly, cheaply, and easily, and could be used to house both stock and grain or hay. In short, it was an ideal structure for the pioneer agriculturalist" (Wacker 1973: 41).

A structure that combined both simple construction and an extended life for hay made it popular with farmers. In an interview with farmer Marcellus Englebrect of Andale, Kansas,

**Fig. 4**  
*A hooimijt at Domein Bokrijk, Belgium, 2008.*  
(Photo courtesy Hilde Schoefs.)



researcher James Hoy notes that Englebrecht “says that a hay roof is the cheapest possible shelter for a hundred tons of hay, and he showed me some bales that had been in his shed for ten years, the hay still bright” (1990: 121).

At some point, the concept of this practical and inexpensive structure hopped the Gulf of St. Lawrence and was introduced into the vernacular architecture of Newfoundland. It was a firm part of regional agricultural traditions surrounding St. John’s on the east coast of the island, and in the Codroy Valley on the west by the middle of the 19th century. In the Codroy Valley of Newfoundland’s west coast, farmers found that the hay barrack was cheap and easy to build, and, as late as 1983, there were at least ten hay barracks still in use in the region (MacKinnon 2002: 28). MacKinnon explains the hay barrack’s advantages:

An advantage of the barrack is that it can be left for the winter in difficult to reach hay fields. The farmer is able to situate a barrack on the fertile, low intervalle land along the rivers, and even on the small islands in the rivers. The hay in barracks is sometimes hauled in winter over the snow and ice to the barn. Farmers who don’t have a hay barn find the hay barrack a useful and inexpensive replacement for a large hay barn. An unassisted farmer, with materials readily available on his farm can easily build it. (MacKinnon 2002: 28-29)

## Codroy Valley Hay Barracks

The Codroy Valley is a glacial valley formed in the Anguille Mountains, a sub-range of the Long Range Mountains that run along Newfoundland’s southwest coast (see Fig. 5). A particularly fertile area for agriculture, European settlers had begun to farm the area by the early 1800s. Many Codroy Valley settlers were of Scottish origin, arriving in Newfoundland via earlier settlements in Cape Breton, Nova Scotia. They brought with them knowledge of farming culture, and of hay barracks, which were used extensively in Cape Breton, particularly in the Margaree River district (MacKinnon 2002: 29).

Kevin Aucoin’s family provides a good example of this transfer of Cape Breton agricultural knowledge to Newfoundland. Aucoin was born in 1941 and grew up in the Codroy Valley in the small community of Tompkins. The son of William and Dorothy Aucoin, his grandfather William came from Cape Breton to Newfoundland in approximately 1880 at the age of sixteen. Like other farmers in the valley, the Aucoins made use of hay barracks.

“In our region everybody had a farm—we all grew up on farms in the community and I would say pretty well every farm family had one of these—very very common process at that time,” notes Aucoin in a 2011 interview. “We’re now talking in my own lifetime, the ’40s and ’50s and families ahead of me would have had those, so we’re going back to the early part of the 20th century, I suspect.” He goes on to say,

**Fig. 5**  
*A view of the Codroy Valley. (Photo courtesy Kevin Aucoin.)*





Traditionally in that region most people had vegetable crops, a few cattle; everybody kept a few sheep and cattle.... They milked their own cattle and that's why they had forage land. So you had vegetable crops and forage land was very much the common pattern. (2011)

Aucoin uses the phrases "hay barrack" and "hay stack" interchangeably to refer to the same type of structure:

four large corner poles probably 25-30 feet [7.6-9 metres] in height, a wooden structure around the base, probably fairly open. But a fence-like structure, about 6 feet [1.8 metres] high, very, very heavy peaked roof attached to the four poles, and holes drilled in the four corner poles with stakes so that you could lift the roof as you needed to while you were storing hay. And I have to tell you from experience that roof was bloody-well heavy. Took four sons at least to lift it! (2011)

Aucoin notes the barrack preceded the hayloft in the Codroy Valley, and also served as a secondary storage facility:

Many people had their outbuildings and their barns for cattle and hay and that kind of thing and some would have stored hay in the barns

anyway, so this may have been a secondary system for storage or if you were growing oats. Many people did, you tended to store the oats outside, or other grains, and the straw that way. You probably would have put your better hay in the barn and you probably would have put straw, oats and whatnot in the outside stack. So it had kind of a diverse use. (2011)

The Aucoin hay stacks or barracks were 2 square metres, with hay stacked up 3 to 3.5 metres. This would give the farmer 136 cubic metres of stored hay. Such a barrack would preserve hay into the next spring, depending on hay quality and weather.

You had a wooden structure underneath to allow aeration and to prevent everything going down into, you know, moisture problems. So you had to try and select dry land, allow for drainage underneath and prevent any mould or problems. So I'm guessing the fence structure would have been 4-6 feet [1.2-1.8 metres] high all around on a wooden base structure, and your very heavy corner poles helping to support the whole system, keeping it all together. (Aucoin 2011)

**Fig. 6**  
*An undated photo of Haymarket Square, Duckworth Street, St. John's, showing hay wagons, probably late 1890s or early 1900s. (City of St. John's Archives photograph 01-13-035.)*



## St. John's Area Hay Barracks

A number of hay barracks were on the farms around St. John's, on the east coast of Newfoundland. "Haymaking was a 'must' job on all the farms in the St. John's area, for hay was the mainstay of the cows' and horses' diet" writes Hilda Chaulk Murray (2002: 92). Hay was important, even in urban centres like St. John's, where cart horses were an integral part of everyday life, well into the 20th century (Fig. 6).

On August 7, 1893, the St. John's newspaper the *Evening Telegram* ran a notice for the public auction of the property of the P. Summers Estate, "beautifully situated on Topsail Road, only three miles from Cross Roads at Riverhead. The Farm contains 10 acres, 8 ½ of which are under cultivation, with a substantial Cottage, 2 Barns, and Hay Barracks thereon" (Valuable Farm 1893). Similarly, in a will dated the May 1, 1869, one William Quigley bequeathed to his son Peter Quigley and his daughters Catherine, Judy and Ann the joint use of his old farm at "Study Water," (possibly Steady Water) on Topsail Road, and, along with bedding, furniture, utensils and horse-related gear, the "Hay Barrack" (Benson and Benoit 2013).

Just as in the Codroy Valley, St. John's-area farmers used a combination of hay barracks and

barns, storing hay in different locations. Ease of access was one consideration, though one St. John's farmer, Kevin Kenny, told Murray that "[his] father never liked to have too much hay in the hayloft near the house because he was always afraid of fire" (Murray 2002: 151).

Murray notes that some farmers stored a great deal of hay outside of the barns in barracks (2002: 150-51); Leonard Ruby had three hay barns supplemented by six hay barracks. Murray writes,

Barracks at Westvale Farm were located in the field across the road from the barnyard. Leonard Ruby pointed out that they used hay from the barn and from the barracks concurrently. "It all depended on the weather. The barracks could be 20 feet [6.1 metres] high. Dangerous in windy weather." (2002: 151)

In areas of greater agricultural production, this pattern of barns partnered with barracks seems to have been standard. In smaller communities, barracks were less common, or even unknown. Hay making was still important (see Pocius 1991: 118-21), but smaller-purpose hay sheds or loft spaces within stables were the norm. As an example, the small community of Tilting, Fogo Island, had at one point no fewer than five "hay houses"—one-storey buildings with an area of 11.1 or 15.6 square metres, with flat or low pitch roofs, and no windows (Mellin 2003: 190).

**Fig. 7**  
*The last Killbride hay barrack, ca. 1969. (Photo by David Courtney, Memorial University of Newfoundland Folklore and Language Archive, photograph P72 69-009A. Used with permission of the Courtney family.)*



## Decline in Use

By the 1970s, hay barracks had started to vanish from the Newfoundland landscape. Researcher David Courtney noted ca. 1969 that as a child, the primary use of hay barracks for people of his generation was to "get in to play or shelter from the rain." Of a hay barrack he photographed in Killbride (see Fig. 7), he stated, "this was the last of the hay barracks. As kids, we used to play cowboys, cards, and older kids used it for courting. I can remember getting put out of it many times by our grandmother" (Courtney 1969). In 1976, though most hay barracks had vanished from the St. John's area, they were still enough in the public memory to have been included in a teacher's guide for studying local community resources (Barry 1976: 66). One of the last documented hay barracks on the west coast of the island was



that at Cape Anguille, photographed in its final days in the early 1990s (Fig. 8).

Today it is difficult, if not impossible, to find any hay barracks in Newfoundland, victims of changing agricultural practice and easy prey to the elements. Richard MacKinnon in 2002 described the hay barrack as “a once popular impermanent structure that is now uncommon in most North American farm districts” (2002: 27). This impermanence of design has certainly been a factor in their gradual disappearance from the cultural landscape of Newfoundland. Like fishing stages and flakes for drying fish, barracks were never constructed to be permanent structures, and once their usefulness faded, the elements quickly took their toll. In Kansas, “wind is the major enemy of the hay roof” wrote James Hoy in 1990 (121), echoing Newfoundland farmer Leonard Ruby’s concern about barracks and windy weather, and Peter Wacker notes that barracks “have proved to be far more transient features on the cultural landscape of New Jersey than have the Dutch barns” (1973: 38). In their 1995 field guide to North American barns, Noble and Cleek noted that hay barracks are “now very rare” (1995: 162).

“As farms declined, when we go through the ’60s and ’70s, many families were self-

sustaining: large families, large farms, livestock and everything. As the evolution of the farm industry changed so those practices changed,” states Kevin Aucoin:

So I think it changed with respect to fewer people around to sustain the farm, fewer animals —no need for the facility. Unfortunately it parallels the old root cellar in many ways.... They are very unique facilities and they were very much part of the landscape but unfortunately no longer exist (2011).

## Conclusions

As Aucoin notes in relation to root cellars, the demise of the hay barrack tradition is a story that is repeated across Canada with vernacular buildings: corn cribs, tobacco kilns, equipment sheds, even outhouses. A study of hay barracks, as only one example, allows us to gain a better understanding of how people interact with the environment. It also gives us a starting point for oral histories, providing a point of reference for interviewer and interviewee that can lead to deeper discussions about agricultural history, subsistence, economy and change.



**Fig. 8**  
*Cape Anguille hay barrack, early 1990s. (Photo courtesy John Pratt.)*



## Notes

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1. As an aside, other British terms like “hay rick” or “wheat rick” sound similar to “barrack,” but may have different etymological origins, with “rick” meaning “stack” or “stook,” and being a cognate to the Dutch *rook* rather than the Dutch *berg*.

## References

- Airs, M. 1983. Hovels or Helms; some further evidence from the 17th century. *Vernacular Architecture* 14:50-51.
- Aucoin, Kevin. 2011. Kevin Aucoin discusses Hay Barracks. Interview with Dale Jarvis, August 19, 2011. *Memorial University Libraries, Digital Archives Initiative*. <http://tinyurl.com/75ap2sk> (accessed May 28, 2014).
- Barry, Rosemary Catherine. 1976. The effectiveness of a unit on community study in changing attitudes towards the community and social studies. An internship report presented to the Faculty of Education, Memorial University of Newfoundland, St. John's, NL.
- Benson, Judy, and Ivy F. Benoit. 2013. Will of William Quigley. *Newfoundland's Grand Banks: Genealogical and historical data for the Province of Newfoundland and Labrador*. <http://ngb.chebucto.org/Wills/quigley-william-3-148.shtml> (accessed May 28, 2014).
- Canada's Historic Places. 2014a. Duke of Sutherland Site Complex. <http://historicplaces.ca/en/rep-reg/place-lieu.aspx?id=5138&cpid> (accessed 30 April 2014).
- . 2014b. Shano/Le Shane Property Registered Heritage Structure. <http://historicplaces.ca/en/rep-reg/place-lieu.aspx?id=6246> (accessed April 30, 2014).
- Courtney, David. 1969. David Courtney collection, fond 69-00A. Memorial University of Newfoundland Folklore and Language Archive (MUNFLA), St. John's.
- Dyer, Christopher. 1984. Evidence for Helms in Gloucestershire. *Vernacular Architecture* 15:42-45.
- Hoy, James. 1990. The Hay Barrack in Kansas. *Mid-American Folklore* 8 (2): 116-29.
- MacKinnon, Richard. 2002. *Vernacular Architecture in the Codroy Valley. Mercury Series History Division Paper 52*. Hull, QC: Canadian Museum of Civilization.
- Mellin, Robert. 2003. *Tilting: House launching, slide hauling, potato trenching, and other tales from a Newfoundland fishing village*. New York: Princeton Architectural Press.
- Murray, Hilda Chaulk. 2002. *Cows Don't Know It's Sunday: Agricultural Life in St. John's*. St. John's: ISER Books.
- Needham, Sue. 1984. Helms, Hovels, Belfrys: More evidence from probate inventories. *Vernacular Architecture* 15:45-16.
- Noble, Allen G. 1985. The Hay Barrack: Form and Function of a Relict Landscape Feature. *Journal of Cultural Geography* 5 (2): 107-16.
- Noble, Allen G., and Richard K. Cleek. 1995. *The Old Barn Book: A Field Guide to North American Barns and Other Farm Structures*. New Brunswick, NJ: Rutgers University Press.
- Pocius, Gerald L. 1991. *A Place To Belong: Community Order and Everyday Space in Calvert, Newfoundland*. Athens, Georgia: University of Georgia Press.
- Ruby, Leonard. 2011. Leonard Ruby discusses Hay Barracks and the technological changes in farming. Interview with Kevin Aucoin, August 16, 2011. *Memorial University Libraries, Digital Archives Initiative*. <http://tinyurl.com/o8rw5uk> (accessed May 28, 2014).
- Shoemaker, Alfred L. 1958. Barracks. *Pennsylvania Folklife* 9:3-11.
- Story, George Morley, ed. 1990. *Dictionary of Newfoundland English*. St. John's: Breakwater.
- Valuable Farm on Topsail Road. 1893. *The Evening Telegram*. August 7, 5.
- Vlach, John Michael. 2003. *Barns*. New York: W. W. Norton and Co.
- Wacker, Peter O. 1973. Folk Architecture as an Indicator of Culture Areas and Culture Diffusion: Dutch Barns and Barracks in New Jersey. *Pioneer America* 5:36-47.
- Zimmerman, W. Haio. 1992. The “Helm” in England, Wales, Scandinavia and North America. *Vernacular Architecture* 22:34-43.