



ABOVE AND BELOW: Impressions of early Aids to Navigation of the Medieval period.





# The Keeping of Lights

Extracted from: *Light On The Forelands* by Ken & Clifford Trethewey, Jazz-Fusion Books (2022)

## Birth of a Tradition

Lighthouse keeping in our culture; Its origins; First methods; Benefits to Society;  
The profit motive; Uncovering the untold stories of light keepers

### Through The Eyes Of A Child

In the western culture a child first recognizes a lighthouse from the age of three or four years old. As she develops her language skills, the child expects every seaside picture to contain a red and white striped building with a light on top. Alongside this early learning the child acquires the stereotypical image of a lighthouse keeper – a grandfather figure with nicotine-stained, crooked teeth, unruly white hair and a scary beard living alone in a tower in the middle of a turbulent sea. At a more mature age, perhaps in some minds' eyes, the child's image of a light keeper has a peaked cap pulled tightly over his brow, as he watches over his brilliant white light that shines out over the sea.

The close association with solitude and the tendency to degenerate into eccentricity – if not worse – has most grown-ups searching for understanding. Curiosity is always aroused by the thought of where the light keeper sleeps and how he goes to the toilet. The thought of him having a roast dinner raises occasional eyebrows, and the way in which he avoids monotony and boredom is always of

continual interest, but a possible love affair with the bottle and its contents is only to be expected. As with so many stereotypes, this one has rarely reflected reality.

There are, of course, many other factors involved. For example, how does he get on with other men who may be selected to work alongside him for weeks on end? Will they have arguments? Do they play games in the evening, or perhaps engage in lonely fishing from the rocks below? The answers to all these questions are, of course, obvious. They do all of these things, but a great deal more besides. Light keepers have fished from the top of their lighthouses too, sometimes using kites by which their lines can be drawn away from the immediate rocks below. Light keepers have indulged in handicraft across a broad spectrum from model-making to knitting. And because of their duty to keep watch, frequently across great tapestries of empty sea, many have become avid bird-watchers. From the 1960s, the advent of television was transformational (detrimental, some might argue) in their lives for they were then able to indulge in the same activities as their relatives ashore.



Contact with families was of course difficult at first. The idea that our friendly chap would receive a delivery of sandwiches in a lunch basket down a zip wire from ashore is fanciful, but fun! If only there were still keepers in lighthouses today, I am sure the mustard sandwiches would be delivered by enterprising family members with drones! It is certainly true that some keepers in the past exchanged messages with their loved ones ashore using flag signals.<sup>1</sup> We shall see later how lighthouses played a vital role in the development of wireless technology, but it was the arrival of the radio telephone that allowed irregular voice contact with those ashore.

It is hard to imagine just how wonderful it was to receive a letter from a loved one after weeks of isolation, but mail was restricted to the possibility of boat delivery, often greatly disrupted by weather conditions and sea states. The most significant event was the exchange of lighthouse keepers, the new keeper arriving to take over from another who had completed his tour of duty. Curiosity of landlubbers was always aroused when news came that relief boats had been unable to reach their targets for weeks owing to continued spells of bad weather. It is not unknown for light keepers to have been trapped in their lighthouses for three months or more when this happened, and the stories that marooned lighthouse keepers were forced to eat

candles when their supplies ran out, if apocryphal, are not ridiculous in times when candles were, indeed, edible, made not from hydrocarbons but from animal and vegetable fats.

### How Did It All Start?

The full story of light keepers is much under-reported. In more than fifty years of serious research I have seen many books published about lighthouses and their history, but most are entirely concerned with the buildings. In comparison, few in-depth studies of the lives and work of light keepers have been made. Some keepers have, from time to time, written their memoirs, but few manuscripts have emerged from the clutches of their families and even fewer have enabled their authors to include themselves amongst the lofty ranks of the 'published author.' Curiously, if invited to name a famous lighthouse keeper, an ordinary person is likely to name Grace Darling who was not a keeper but a child heroine of the Victorian period living in the Longstone lighthouse with her family. I suspect that a smaller proportion of people would know that her father's name was light keeper William Darling.

As long ago as 1837, it must have been common to think that the life of a light keeper was desirable to say the least. Dickens, for one, seemed to believe it when his character Sam Weller in *Pickwick Papers* said, "anythin' for a quiet life, as the man said when

<sup>1</sup> Trethewey, Ken: *Lighthouses of Cornwall and Devon*, p130.



he took the situation at the lighthouse.”

The Pharos of Alexandria is, of course, generally regarded as the first lighthouse of which there is no doubt. I have described it in great detail elsewhere.<sup>2</sup> So great was the achievement in creating it that little comment has been made about the men who kept it lit. A lantern graced the summit. It is thought that the light the shone from there was created by a wood fire, and if so it would have required a great deal of fuel. Furthermore, the structure was the tallest in the world at the time and would have demanded a continuous resupply of that wood. Whether the lantern was glazed or open to the weather is not known, but it is likely that it was not glazed at any point in history since no references to it have been found so far. In the 16th and 17th centuries, lighthouses lit by fire faced real difficulties in this regard because soot coated the inside of the panes of glass and there were problems in dealing with huge amounts of smoke. All this greatly reduced visibility at sea. The sheer scale of the operation in the Pharos would mean that great quantities of smoke would be produced and so the idea of glazing is not sensible. Thus, it is most likely that the lantern, whilst covered with a roof, was nevertheless open to the atmosphere. (Smoke is, of course, equally valuable as a signal during daylight hours.)

It is possible that light was produced by the burning of other fuels. Oil lamps were available

<sup>2</sup> Trethewey, Ken: *Ancient Lighthouses*, pp135-196.

and could certainly have been used at some point. Perhaps we might conclude that the inclusion of a wide ramp for easy access up the inside of the tower was to facilitate transport of the voluminous fuel materials to the top of the lighthouse. This would imply the use of wood for the first light. Open fires are well known to consume large amounts of fuel and this would necessitate the implementation of an effective logistics operation on a big scale. The use of horse-drawn carts or simply pack-horses up the internal ramp is likely in view of the design of the tower. Other organic fuels could have superseded wood at a later date, reducing the need for such a heavy demand for fuel.

We should conclude that the fire was large and generated much light, for later descriptions of the marvels of the tower include reference to the great light generated from the building. Josephus recorded that the light from the Pharos was visible for 300 stadia - translated into 300 furlongs or 35 miles. This is consistent with current knowledge. Calculations show that the distance to the horizon of a viewer at a height of 120 m above sea level is 40 km. Therefore, we must discount accounts that claimed the light could be seen from 300 miles. Certainly the Earth's curvature would preclude direct observation from such a distance, and it is true that with a sufficiently bright light the glare can be seen from beyond the horizon. However, such a great distance must be much too far. In a cloudless sky, it would have been possible to see smoke from distances



greater than 40 km and perhaps this might have given support to mariners heading in the direction of Alexandria.

An outstanding feature of the Pharos was its great height. For ships that were dependent for their navigation on the identification of natural landmarks, it was surely a good idea to make it visible to ships at sea over a far greater distance than the surrounding low land would allow. Ships would find the port of Alexandria easily by day and night and it was good for business to have as many ships as possible visit the port.

After many years of research, I have concluded that the first light keepers were priests or others associated with religious activities in the ancient Greek culture, although we cannot rule out similar activities in even earlier times as part of other pagan cultures.<sup>3</sup> A journey to sea placed a life in the hands of the gods, and so the planned voyage began with a prayer for safekeeping during a dangerous mission; likewise, a safe return necessitated an offer of thanksgiving. At the points of departure and return it became common for certain locations – often in prominent positions – to be designated sites for these acts of prayer which almost always involved the use of fire – whether by day or night. Priests were appointed to look after these sites and the keeping of lights at night was part of his duties at the site of worship. As an added benefit, the lights were helpful to mariners. Such lights are now known as

<sup>3</sup> Trethewey, Ken: *Ancient Lighthouses* (2018).

ecclesiastical lights.

Accepting that, even earlier, the casual recognition of lights ashore was helpful to mariners, it was this part of human culture that initiated and formalized the occupation of light keeping. Thus, from the most ancient times around the Mediterranean, the idea was continued throughout history, especially when Rome was the focus of much of the culture in Europe, but always subject to the constraints that it should not provide assistance to an enemy. If an enemy was expected, lights were generally extinguished. Thus, the showing of lights for mariners was typically during periods of political stability. Once the Roman civilization had given way to five or six centuries of comparative instability across Europe and the Middle East known as the Dark Ages, lighthouses were largely extinguished until the cultures had developed sufficiently to sustain them. So from around 400 to 1600 CE the provision of lights became much more haphazard, carried out mostly by people of the Christian tradition who felt it was part of their duty to humanity to assist travellers at sea. Thus we find that hermits and monks who occupied isolated locations around the coasts were predisposed to keeping lights burning at night with the result that sites from which lights were commonly shown became recognized as aids to navigation. Yet again, the role of women may have been grossly underestimated since it was in their interests too to see their menfolk return from perilous journeys. Keeping a light in

their window seems an obvious strategy in the hope that a husband might see it and steer home safely.<sup>4</sup>

### The Co-operatives

By the time of the early Middle Ages, hostilities had reduced across Europe and during periods of stability helmsmen of marine craft, whether big or small, had begun to organize themselves into self-help groups – guilds, fraternities, brotherhoods and other similar unions – and almost always had a Christian focus of some kind. The best known in the British Isles were a number of ‘Trinity Houses’ who adopted the objective of protecting the livelihoods of those associated with the sea in their own localities.

In the working environment such co-operatives involved the provision of pilots with detailed local knowledge to assist navigators in tricky waters. There was also the setting of buoys and other markers in places where helmsmen most needed them. In the early days, however, it seems that the motivation to set up lights as aids to navigation was further down the list of priorities and, apart from a very few sites, almost all known lights were ecclesiastical rather than co-operative in origin. We shall see in other chapters, with some surprise no doubt, how long it took authorities like Trinity House to respond to the demand from mariners for more lighthouses. In the life of communities, however, it was the need for assistance to mariners and their families who had fallen on hard times that became a major part of the aims of these brotherhoods. It seems clear that these features of the British culture were taking place from Saxon times, though there is little evidence to prove it. What is clear is that during the whole of this period during the middle ages, the modest number of lights available as ‘Aids to Navigation’ were almost entirely provided by the Christian community, in the broadest sense, lights that have been commonly referred to as Ecclesiastical.

---

<sup>4</sup> The paradigm shift that occurred when historians began to apply the scientific method to their research led to doubt being cast on a great many ancient reports of lights being shown from certain locations. This was not helped by the tendency of ancient authors to introduce spiritual and metaphysical details into their story-telling, but, in my opinion, the stories were frequently based on truths and despite some exaggeration, many of the sites of ‘reputed lights’ should be taken much more seriously.

### The Capitalist Motive

Once it had been recognised that it was important to display lights at night to assist the safety of mariners and to protect merchandise in transit by sea, it is clear that humans were required to set the lights and maintain them throughout the hours of darkness. An entirely new phase of lighthouse building began in the period we have chosen to call Industrial. It fell upon entrepreneurs to seek Royal Assent for the building of lightstructures and for permission to charge fees from passing ships. In this way the costs of building and maintaining the lightstructures could be offset by revenues obtained from the business users. It was therefore a prerequisite for the lighthouse owners to employ individuals to keep the lights working at night. As we shall see later, these individuals were not just any simple labourers but men who could be relied upon. Finally, a situation had been created within the growing Capitalist ethos by which the provision of lights as navigational aids had become part of a nation's economy. The association of light-provision with money now introduced an entirely new set of risk and reward, and with the paid employment of keepers for the lights came a new clutch of working practices.

I have identified the approximate year of 1600 as the watershed at which Ecclesiastical lights were in rapid decline, replaced by a nascent system of lights instigated by a number of entrepreneurs attracted by the lure of profit. It was about this time that ordinary people were being transformed from hunter-gatherers to wage earners.

The methods employed for creating the lights were primitive, generally involving the use of coal or sometimes wood fires. Or, simply, candles. In any case, the burning of a solid or liquid fuel was not achievable without significant human input and so keepers were required to watch over their lights during the entire period when the light was expected to be lit. Only much later was it possible to adopt systems whereby lights could be left unattended.

In the early days, it was common simply to employ a single keeper who lived and worked either in the lighthouse or very close by. Lighthouses became the homes of keepers and their families. In the wider society to be employed as a light keeper constituted a significant benefit since employment was solid and throughout the entire year, in contrast to, say, work in agriculture which had a strong

seasonal variation. Light keepers were generally provided with basic accommodation that, again in those times, was a generous benefit not available to many other workers, and often they had the benefit of free fuel for heating and cooking since there was generally a good supply available for providing the light to the lighthouse.

Early lighthouses required significant amounts of effort to keep them alight. For example, in order to maintain a coal fire light on an elevated platform required the provision of large quantities of coal, a bulky material of significant weight. There was much work involved in moving it around the lighthouse site, and particularly elevating it to the top of the platform where it was to be consumed.<sup>5</sup> The significant requirements for manpower sometimes necessitated the employment of two keepers at a single lighthouse, but this was not formally established until 1832 onwards when Trinity House finally assumed responsibility for all lighthouses in England and Wales. Until then it was normal for a single keeper to be expected to carry out all of the necessary operations involving coal and its consumption, although of course it was frequently the case that assistance was provided by able-bodied family members. In this sense it was common for the role of light keeper to remain within a family; a son assumed the roles of his father as the older man became less able to complete the manual work required. This kind of situation is exemplified by the Knott family at South Foreland, where, until the 1840s, a single family managed the work of a single lighthouse.

For many years, the light keeper's wages were some £40 to £50 per annum, as well as the fringe benefits mentioned above.

### **The Hunt for Details**

**M**uch of this information is embedded deep in the public domain, somewhat scattered, but ready to be found. There are, however, elements of the light keepers' profession that remain mysterious. Part of the problem resides in the English class system which has existed for many centuries. In particular I refer to the idea that members of a certain cohort of society are treated differently from those in another. We are all familiar with the concept of master and servant, employer and employee, educated and illiterate. The 'us'

<sup>5</sup> You would be expected to ask why the fire had to be on an elevated platform? Well, simply because something might come along and stand in its way, thus obscuring the light. Trees, bushes, etc might grow up in front of it. It was much more reliable if elevated, but harder work!

and 'them' nature of life in Britain permeated every aspect of British culture. The ruling class had importance; the working class did not, and as a result they were anonymized by their rulers.

Of particular relevance to lighthouses is the idea that light keepers were in the working class and of low intellect. There was always a certain element of responsibility associated with the employment, since the keeper should be relied upon to perform his duties regularly, reliably and without variation. His duties required a certain amount of understanding and, as time passed, training. However, in the early days, literacy was not necessarily a requirement. The common factor with regard to the class system was that members of the lower classes were almost never named in documents. There are countless examples of documents that describe the lighthouses, their construction, and many other aspects of design and operation, and despite occasional great depth of detail, the names of those expected to keep the systems working were never reported, unlike those members above the glass ceiling who were almost always noted by name. This impact of the class system upon British history of course relates not just to light keepers but across the entire social strata. Today, in an environment where social consciousness rightly plays a greater part, those wishing to study in more detail the working lives of light keepers and their families struggle to find the kind of data that makes their assessments credible.

By far the greatest source of data is the priceless record provided by the censuses from 1841 onwards and the scouring of these records by enthusiasts, most of whom are searching for their family history, has taken up huge amounts of research hours. Even so, a thorough understanding of the picture painted by census data remains incomplete as anyone who has spent time in this activity will concede. Clearly the ten-year gap between these population milestones is too great to enable complete understanding of employment records, or indeed any other records. Researchers have to be steadfast in their determination to uncover as many other sources as possible.

Precious too is the extensive recording of daily life undertaken by local newspapers and it is from these sources that the gaps in the census data are most likely to be filled. As we have found in our research, census records have been less useful in assisting the search for light keepers than we might have expected. However, cursory examination of the issue quickly reveals the reason: those men who were in isolated situations, for example rock

lighthouses, were frequently omitted from the census records. There are many reasons why they slip through the census net when that mesh should have been enough to capture them. Nevertheless, examination of census data for service records of light keepers is frequently frustrating.

Particular addresses were often associated with specific offshore lights and it may be possible to identify families of keepers on duty in these lights at the time of the census. However it would be dangerous to assume that this was always the case since there were situations whereby unmarried light keepers might not have required the accommodation available to them and a certain address might therefore have been used for another keeper on another lighthouse who did have a family to house while he was offshore. This kind of information is precious.

In the case of those keepers employed at harbour lighthouses it was often the case that they did not live close to the lighthouse but could have been housed some distance away. The identification of a light keeper at a particular address did not inform the researcher as to his appointment. Thus, the matching of names with particular lighthouses is hindered still further.

An element of responsibility was associated with the employment, since the keeper should be relied upon to perform his duties regularly, reliably and without variation. His duties required a certain amount of understanding and, as time passed, training. However, in the early days, literacy was not necessarily a requirement. The common factor with regard to the class system was that members of the lower classes were almost never named in documents. There are countless examples of documents that describe the lighthouses, their construction, and many other aspects of design and operation, and despite occasional great depth of detail, the names of those expected to keep the systems working were never reported, unlike those members above the glass ceiling who were almost always noted by name. This impact of the class system upon British history of course relates not just to light keepers but across the entire social strata. Today, in an environment where social consciousness rightly plays a greater part, those wishing to study in more detail the working lives of light keepers and their families struggle to find the kind of data that makes their assessments credible.

By far the greatest source of data is the priceless record provided by the censuses from 1841 onwards and the scouring of these records by enthusiasts, most of whom are searching for their family history, has taken up huge amounts of research hours. Even so, a thorough understanding of the picture painted by census data remains incomplete as anyone who has spent time in this activity will concede. Clearly the ten-year gap between these population milestones is too great to enable complete understanding of employment records, or indeed any other records. Researchers have to be steadfast in their determination to uncover as many other sources as possible.

Precious too is the extensive recording of daily life undertaken by local newspapers and it is from these sources that the gaps in the census data are most likely to be filled. As we have found in our research, census records have been less useful in assisting the search for light keepers than we might have expected. However, cursory examination of the issue quickly reveals the reason: those men who were in isolated situations, for example rock lighthouses, were frequently omitted from the census records. There are many reasons why they slip through the census net when that mesh should have been enough to capture them. Nevertheless, examination of census data for service records of light keepers is frequently frustrating.

Particular addresses were often associated with specific offshore lights and it may be possible to identify families of keepers on duty in these lights at the time of the census. However it would be dangerous to assume that this was always the case since there were situations whereby unmarried light keepers might not have required the accommodation available to them and a certain address might therefore have been used for another keeper on another lighthouse who did have a family to house while he was offshore. This kind of information is precious.

In the case of those keepers employed at harbour lighthouses it was often the case that they did not live close to the lighthouse but could have been housed some distance away. The identification of a light keeper at a particular address did not inform the researcher as to his appointment. Thus, the matching of names with particular lighthouses is hindered still further.