

Transport on the Dengie



Thames Sailing Barge Trust



Transport on the Dengie

The coastal nature of the Dengie Hundred played an important role in the pattern of settlement and the type of activity conducted by the inhabitants within its bounds. For example, farms often had marsh lanes leading down to a quay so that farm produce could be taken by cart down to barges. At Bradwell a small community grew up around the quay which served the surrounding agricultural area. In the 18th century it was easier to export produce by sea rather than by road. Many of the incoming barges carried chalk, which was burnt in lime kilns before being applied to the land. Manure from London stables, carried as ballast by the barges, was used as fertiliser. The barges also brought Kentish Ragstone for seawall repairs. The barges returned to London laden with farm produce, which mainly consisted of wheat and barley.

Perhaps the most profitable trade for local ships was the transport of coal, although only a few conducted this trade in the waters of the Crouch. Colliers took cargoes from Sunderland, Seaham and Hartlepool to their home port of Burnham, the round trip taking a fortnight. From here some of it was transferred to barges. This trade provided for many of the locals until the arrival of the railways. Bradwell was the home port of the Parker fleet, numbering 26 Thames barges.

By the start of the 19th century the Dengie Hundred was becoming more accessible, and less of a hinterland. In 1807 the roads in the Hundred were described as “incomparable, every lane seems to rival the finest turnpike”. After 1800 a coach route was established between Burnham, Southminster, and Maldon. By 1848 a regular coach service ran to Chelmsford and back. The area was also served by a sixteen-passenger horse bus, known locally as ‘The Thing’. The improvement in the state of the roads was largely due to the influence of Sir Henry Bate-Dudley. In 1768 he fined Munden parish £250 for having poor roads, although after the road was repaired the fine was lifted. Similar tactics were employed against other negligent parishes.

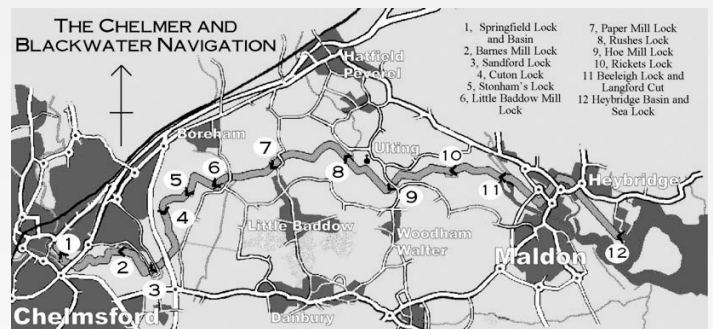
The expansion of heavy industry in the Dengie Hundred was limited by geographical factors. An iron foundry was established at Burnham, with other industry locating in Maldon. In 1850 the salt works, which had been based at Heybridge, moved to Maldon. Agriculture also began to employ steam-powered machinery. Generators were installed

in some of the area’s mills to provide a supplementary source of power.

The railways came relatively late to the Dengie, around 1890, but greatly improved transport links with the rest of the country. The Southminster branch line linked the southern half of the hundred to Wickford. A line also ran between Wickford and Maldon via Stow Maries and Cold Norton. A large amount of freight was carried on the line to London Liverpool Street.

Improved transport, the Bank Holidays Act (1871), and holidays with pay (c1880), allowed more people to engage in sports and other leisure activities.

Chelmer & Blackwater Navigation



The Chelmer and Blackwater Navigation is the canalisation of the Rivers Chelmer and Blackwater. The navigation runs for 13.75 miles from Springfield Basin in Chelmsford to the sea lock at Heybridge Basin. It was opened in 1797.

Prior to the actual construction of the navigation, there had been almost 120 years of proposals for such a scheme, and opposition from the port of Maldon, which anticipated that its revenues would fall if vessels could travel to Chelmsford. Finally in 1792, with navigations in other parts of the country bringing increased prosperity to the towns they served, the people of Chelmsford decide to avoid the opposition of Maldon by bypassing it, and terminating the navigation at Heybridge, on the River Blackwater below Maldon.

The port of Maldon now tried to mitigate their loss, and produced a plan to improve the Blackwater through Maldon to its junction with the Chelmer at Beeleigh, which was submitted to Parliament in 1793. Realising that this would

Transport on the Dengie

make the final cut to Heybridge redundant, the Navigation Company opposed the Bill, and it was defeated. A revised scheme in April 1795, was also defeated. Work continued on the navigation, with the first section from Heybridge Basin to Little Baddow opening in April 1796 and the navigation opening throughout on 3 June 1797. The final cost was around £50,000.

When completed, 12 locks lowered the level of the navigation by 75 feet from Springfield Basin in Chelmsford to the sea lock at Heybridge Basin. An additional stop lock protected the new cut from flooding at Beeleigh. Here, the navigation left the course of the River Chelmer, and joined that of the River Blackwater, before entering the final 2.5 miles of cut to Heybridge Basin. The waters of the River Blackwater were diverted into the Chelmer, flowing over a weir between Beeleigh Lock and the stop gates. The navigation was constructed with only 2 feet of water, which was the lowest statutory draught for any of the English commercial waterways. The locks were constructed to take barges which were 60 by 16 feet and each could carry around 25 tons. They were horse-drawn, and remained so until the 1960s, when diesel outboard motors were fitted. The only branch was a cut to Langford Mill, built privately by Mr. Westcomb. It was well used until the 1870s, but was unused after 1881.



The Navigation met the River Blackwater at a specially constructed sea lock that was just over 100 feet in length and capable of admitting vessels of 300 tons displacement. A community of waterman, seafarers and canal-related workers grew up at Heybridge Basin. This picture of c1920's shows a Thames sailing barge moored just above the lock.

There were teething problems, with floods in 1797 creating shoals which prevented the passage of barges. These got steadily worse, until Rennie, the builder, was called back in 1799 to address the problem. Rennie was again recalled in 1805, when the mill owners complained about leakage through the locks and requested damages. Further improvements were made, including the rebuilding of Heybridge



Unloading timber from a Thames sailing barge at Heybridge Basin

sea lock by James Green, and trade developed steadily. The first inland gasworks in Britain was built in Chelmsford in 1819, using coal brought up the navigation. Besides coal, bricks, stone, timber and general cargo was carried from Heybridge to Chelmsford, and the major cargo in the reverse direction was grain and flour. Local wharfs served the communities of Little Baddow, Boreham, Ulting and Heybridge. At its peak in the mid 19th century, the canal was carrying over 60,000 tons of cargo per year.

The Eastern Counties Railway reached Chelmsford in 1843, and a branch line from Witham reached Maldon in 1848, but there was never a direct line between the two towns. Although trade declined, the impact of the railways was less significant than on many canals. Following the Second World War, the sea lock into Heybridge Basin was extended to 107 by 26 feet, so that coasters carrying timber from the continent could enter the basin to transfer their cargo to barges.

Transport on the Dengie

Traffic slowly declined until the last load of timber was delivered to Browns Yard on Springfield Basin in 1972. Although commercial traffic ceased, the navigation continued to derive income from water abstraction and from the sale of wood from the willows which grow along the banks. The willow is used for making cricket bats, and the trees were first planted in the 1880s when one of the directors saw the need for alternative sources of income.

Crouch Valley Railway

Before the coming of the railway to Southminster, communications in the peninsula were slow and wearisome and the roads appalling. In the early 1800s, a Mr. Willsmer ran a horse omnibus every Friday from Southminster to the market town of Chelmsford, a distance of about sixteen miles as the crow flies. When the railway line to Maldon opened in 1848, Mr. Willsmer agreed not to run direct to Chelmsford, but to run on Thursdays, Fridays and Saturdays from Burnham to Maldon via Southminster. This was still a long journey over poor roads.

There were several ferries across both the Crouch and Blackwater, which did cut down journey times for those wishing to travel outside the area, but even to reach them was not easy and the main problem was always the distances to be covered on foot or by horse-drawn transport over muddy, pot-holed roads or tracks. Small wonder that the ordinary person, travelled rarely in early Victorian times.

There had been a number of proposals to build a railway line to Southminster, but many of these were speculative and it was not until the Great Eastern Railway which operated lines in North and East London decided to expand its operations that a serious proposal to build a line to Southminster came to fruition. By an Act of 16th July 1893 the GER were empowered to build a line from Shenfield, via Wickford, to Southend, together with a branch from Wickford to Southminster and a branch from Woodham Ferris to Maldon, there joining the existing Witham to Maldon line.

The line from Shenfield to Wickford opened to goods traffic on 19th November 1888 and to passengers on 1st January 1889. There were only two passengers, two ladies on the first train.

After this was completed the GER worked at pace to build the extensions. The Southminster line finished first, opening for goods services on 1st June 1889, whilst the Southend and Maldon lines opened on 1st October 1889. The main engineering contractor for the construction of the Southminster branch was Walter Scott and Co of Newcastle who employed the noted engineer Thomas Middleton to build the stretch from Althorne to Southminster. Stations were built at Battlesbridge, South Woodham Ferrers, North Fambridge, Althorne, Burnham-on-Crouch, Southminster. Over 500 navvies were involved in the construction which cost a total of around £500,000. The Railway Stations and other buildings at Burnham were erected at a cost estimated as between £2000/£3000.

The line took about two years to build with materials shipped in to a quay at Stokes Hall, Althorne by Thames barge from brick fields in Kent. Some 61 barges transported materials to Stokes Hall Wharf between 2nd November 1886 and 21st July 1888 for the building of the railway. There cargoes consisted of bricks, sleepers, track, fish plates in fact all materials needed in building a railway. The barges could carry over 40,000 bricks at a time.

Building the railway line brought with it other problems. In 1889 the Medical Officer for Health for Burnham reported that the large number of navvies now lived in the Parish which had resulted in a rise in the number of deaths to 15 partly caused by the introduction of diphtheria.

	3rd-SINGLE	SINGLE-3rd	
	Fambridge to		
3	Fambridge Althorne or Woodham Ferrers	Fambridge Althorne or Woodham Ferrers	3
	ALTHORNE or WOODHAM FERRERS		
	(E) 0/8	FARE 0/8	(E)
	For conditions see over		

Regular goods services were required to service the Mildmay Ironworks at Burnham on Crouch. Southminster Market was held 9 times a year in relation to horses (not at Christmas or harvest) and weekly for the cattle market. Each mar-

Transport on the Dengie

ket day trains with 10 or more cattle wagons left Southminster. Another regular train was the sugar beet train that left Burnham sidings at 6pm each weekday during the sugar beet season.

In 1889 a first class ticket from Burnham on Crouch to London was 8s 8d (44pence) and a second class ticket was 4s 4d (22 pence). First Class to Maldon was 2s 9d first class and 1s 3d for a third class ticket.



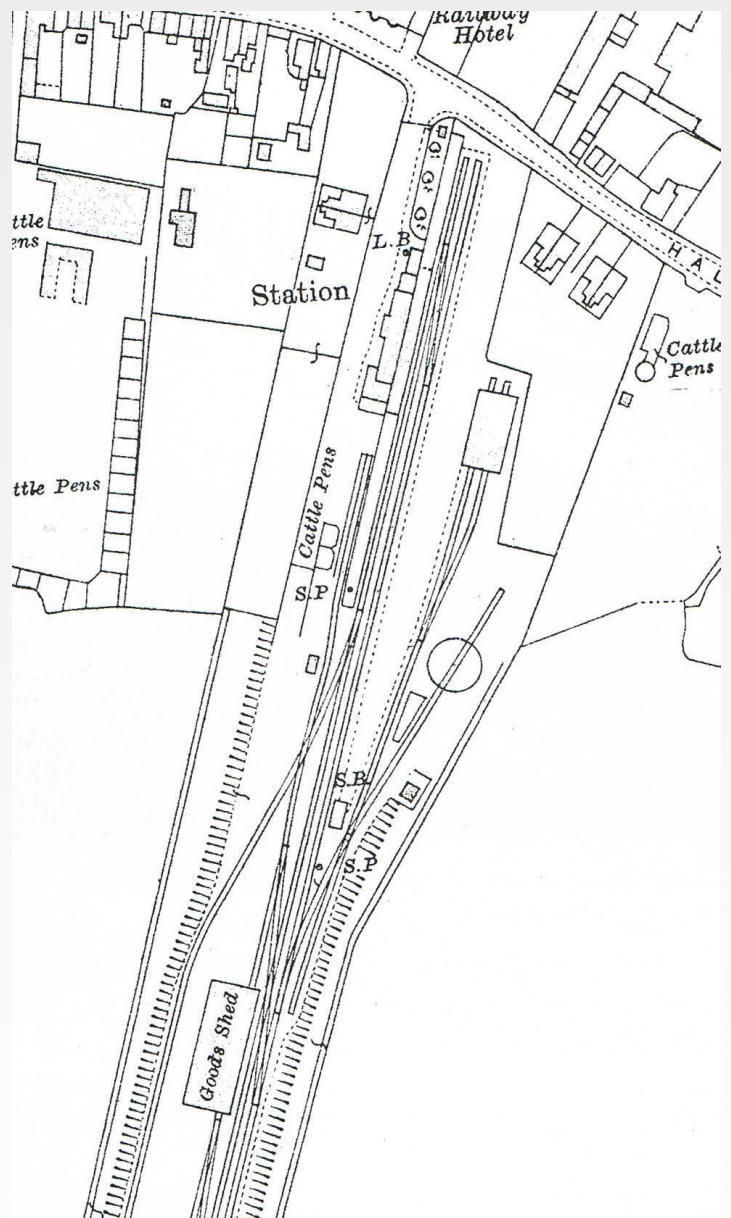
Burnham Station—The Mildmay Iron Works were built on the land to the right

The through trains to London initially terminated at Fenchurch Street but this changed to Liverpool Street with a travelling time of 1 hour 42 minutes. To people used to walking or horse and carts this was really fast travel. The Great Eastern Railway became part of London and North Eastern Railway in 1923 although the rolling stock, staff and stations operated unchanged.

During World War I the Dengie Hundred became a front line area and the railways played an important part in transporting troops and materials for the war effort. World War II once more turned Dengie into a front line area and the Crouch Valley Line again became the central supply line. The Army, Navy and RAF were all well represented and so service vehicles, 'liberty buses' and Service Uniforms became familiar features at Southminster and Burnham Railways Stations.

In 1964 the line survived the 'Beeching Axe' which had closed so many other small branch lines including the nearby Maldon to Witham line. The need for nuclear waste trains and the ballast trains from pits between Burnham and

Southminster seem to have been the deciding factors in not only keeping the line alive but in its eventual electrification in 1986.

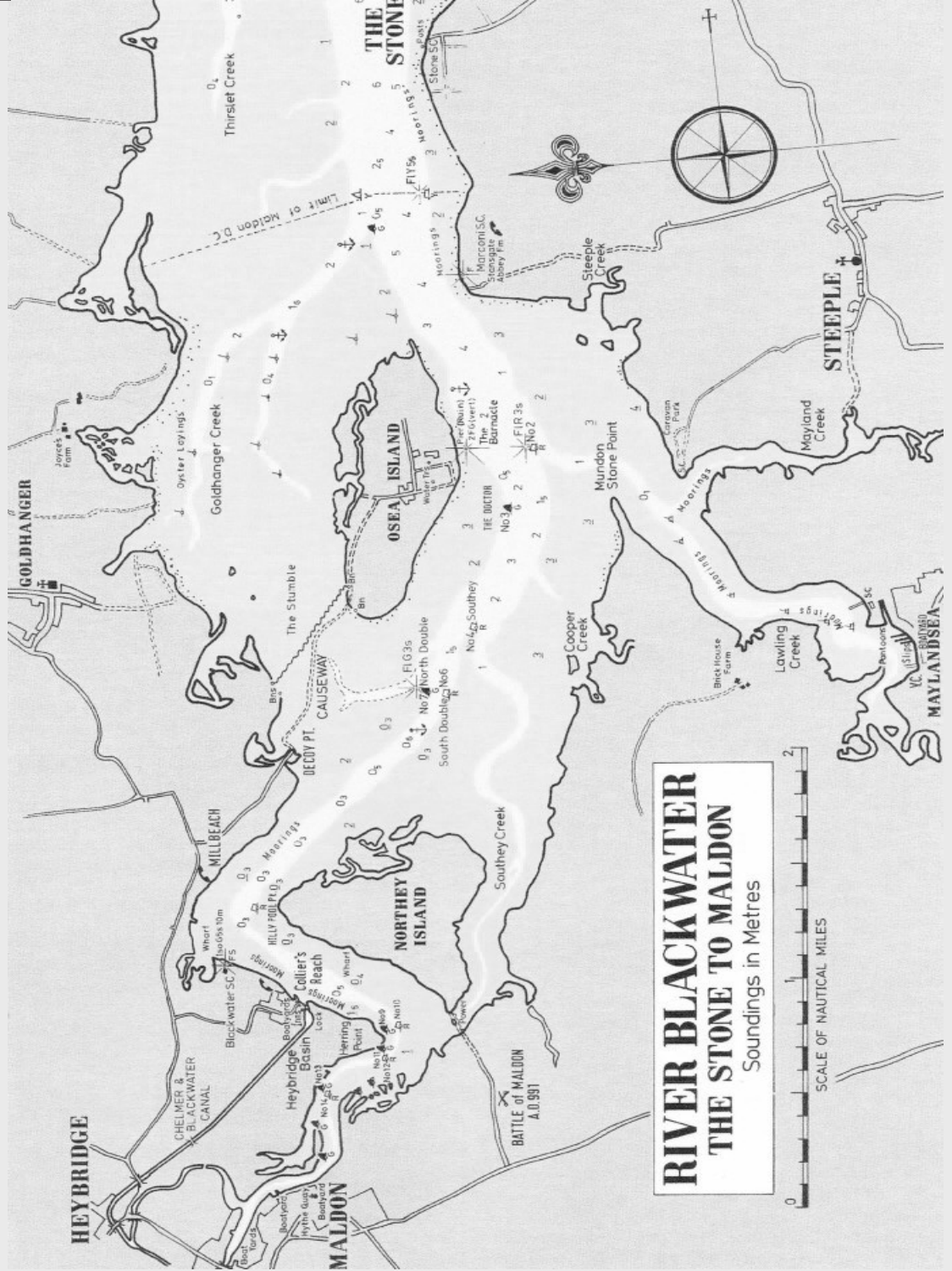


Map of Southminster Station yard

Navigation and Communication



Thames Sailing Barge Trust



Navigation and Communication

Lights, Buoys and Fog signals

How can you find your way out on the water? In Britain a standardised system of buoys, lights and signals help sailors to navigate. Going into a river or estuary like the Blackwater the channel is delineated by port (left hand) and starboard (right hand) buoys. A port hand buoy is coloured red, and its basic shape is that of a can. A starboard hand mark is coloured green, and it is conical in shape. Cardinal channel marks have black double cone top marks showing which side it is safe to pass. North points up: South points down: East points outwards: West points inwards. There are also isolated danger marks, safe water marks and special marks. At night buoys are lit; red and green buoys are lit accordingly. Others normally have white lights which flash in specific patterns so that a navigator can identify exactly each buoy. Lighthouses and some major buoys are also fitted with fog signals of varying types. Minor creeks and channels are often marked by 'withies' placed in the mud by persons with local knowledge.

Tides

Tides are caused by the gravity of the moon and the sun. Although it is usually said that the moon orbits around the earth with the earth's gravity stopping it from flying off into space, the two bodies really make up a single system held together by the mutual attraction of each other's gravity. The moon's gravity is pulling on the water nearest to it more strongly than on the solid earth itself. The effect of the moon's gravity decreases with distance, so the earth's water/sea closest to the moon is attracted to it more strongly than the sea on the far side of the earth. The overall result is the production of two bulges, or tidal waves one on each side of the earth, but both moving around it in its 28-day orbit. So, any point on the earth, which is of course spinning on its own axis, will pass the crest of one wave (high water), then the trough (low water) then the crest and so on. Although the sun is much bigger and heavier than the moon, it is so much further away that its effect is less, but when the sun and the moon are in line with each other, the sun's tide-raising forces supplement those of the moon, causing bigger than average tides. The lowest tides are called Neap Tides and the highest are called Spring Tides – and are not necessarily connected with our actual Spring.

To find out what height the tide will be on a certain day at a certain place Tide Tables are used.

Pilotage

As well as charts, navigators can refer to many publications from Almanacs to Pilot Guides to enable them to navigate safely both out at sea, into estuaries and up rivers like the River Blackwater.

Electronics

In this highly technical world there is also a variety of marine electronic equipment to assist with navigation. There are echo sounders for measuring depth of water, GPS - Global Positioning System, Chart Plotters and Electronic Charts and AIS - an Automatic Identification System which is now mandatory to have on board on the River Thames. None of these was available or would have been needed by trading Barge Skippers who knew the waters like the backs of their hands!

Walton LAT: 51°51'00"N LONG: 1°18'00"E TIMES AND HEIGHTS OF HIGH AND LOW WATERS											
OCTOBER				NOVEMBER				DECEMBER			
GMT	Time	m		Time	m	Time	m	Time	m	Time	m
	0241	1.24	16	0258	0.94	1	0332	0.97	16	0412	0.79
	0853	3.61	W	0921	3.86	F	0943	3.87	SU	1033	4.07
	1511	0.87	W	1548	0.80	F	1620	0.82	SA	1658	0.82
	2128	3.79	TH	2154	4.20		2210	4.13		2258	4.19
1	0944	3.94	17	1012	4.13		1013	4.14		1038	4.23
W	1559	0.71	TH	1638	0.43	SA	1641	0.53	SU	1729	0.64
	2211	4.00		2241	4.30		2250	4.26		2336	4.22
3	0413	0.92	18	0436	0.70	3	0453	0.71	18	0537	0.59
TU	1024	4.02	F	1056	4.24	W	1106	4.26	3	1125	4.36
W	1639	0.59	F	1709	0.52	SU	1721	0.46	M	1802	0.66
	2248	4.15	F	2321	4.34	●	2330	4.40	●	2351	4.43
4	0448	0.82	19	0517	0.62	4	0534	0.60	19	0612	0.22
W	1101	4.15	W	1136	4.30	M	1147	4.39	TH	1207	0.56
W	1715	0.51	SA	1756	0.45	M	1800	0.42	TU	1825	0.21
	2353	4.28									
5	0521	0.72	20	0500	0.36	5	0511	0.46	20	0545	0.19
SA	1151	4.27	SU	1213	4.33	W	1230	4.47	W	1300	4.16
●	2359	4.38		1830	0.51		1840	0.42		1904	0.78
6	0557	0.63	21	0536	0.33	6	0554	0.45	21	0618	0.14
SA	1214	4.36	M	1248	4.32	W	1314	4.48	TH	1336	4.11
SU	1827	0.39		1901	0.61		1920	0.48		1932	0.85
7	0636	4.44	22	0611	0.28	7	0137	4.37	22	0150	4.05
M	1252	4.41	TU	1324	4.25	TH	1400	4.41	F	1412	4.01
	1903	0.40		1930	0.73		2002	0.60		2022	0.92
8	0715	4.41	23	0144	4.15	8	0221	4.22	23	0223	3.96
W	1332	4.39	W	1359	4.14	F	1448	4.20	SA	1449	3.88
	1939	0.46		1957	0.85		2050	0.77		2037	1.01
9	0754	4.32	24	0216	4.01	9	0310	4.03	24	0289	3.83
W	1412	4.31	TH	1435	3.99	SA	1543	4.07	SU	1529	3.73
	1456	4.58		2017	0.57		2146	0.65		2121	1.44
10	0824	4.16	25	0248	3.85	10	0407	3.84	25	0341	3.69
TH	1508	0.96	F	1514	3.81	SU	1551	3.89	M	1619	3.68
	2102	0.76		2104	1.11		2255	1.10		2215	1.28
11	0819	3.97	26	0325	3.69	11	0418	3.71	26	0424	3.63
W	1458	4.00	SA	1559	3.60	M	1608	3.81	TU	1718	3.47
	2158	0.96		2154	1.29		2332	1.37		2322	1.37
12	0413	3.76	27	0414	3.50	12	0013	1.16	27	0545	3.43
SA	1034	0.84	TU	1044	1.05	TH	1034	3.68	TH	1221	0.97
SA	1654	3.81	SU	1659	3.41	W	1310	0.70	W	1835	3.49
	2312	1.13		2307	1.45		1924	3.85		1956	3.79
13	0527	3.59	28	0528	3.35	13	0128	1.11	28	0642	3.35
SU	1201	0.88		1203	1.10		0748	3.75		0700	3.47
	1823	3.72		1825	3.35		1422	0.64		1329	0.90
14	0039	1.17	29	0040	1.46	14	0230	1.01	29	0152	1.21
W	0657	3.59	TH	0651	3.36	TH	0853	3.87	F	0803	3.62
	1329	0.79		1319	1.03		1427	0.78		1427	0.78
	1948	3.83		1940	3.49		2129	4.07		2040	3.83
15	0153	1.08	30	0153	1.33	15	0325	0.90	30	0248	1.03
TU	0816	3.75		0820	3.51		0847	3.88		0850	3.82
	1446	0.64		1422	0.89		1613	0.60		1520	0.67
	2056	4.03		2040	3.71		2216	4.14		2131	4.04
16	0247	1.14	31	0247	1.14						
	0855	3.72		0855	3.72						
	1514	0.64		1514	0.64						
	2128	3.94		2128	3.94						

Tide Table

Navigation and Communication

Beaufort Wind Force Scale

Specifications and equivalent speeds									
Beaufort wind scale	Mean Wind Speed		Limits of wind speed		Wind descriptive terms	Probable wave height in metres*	Probable maximum wave height in metres*	Seastate	Sea descriptive terms
	Knots	ms ⁻¹	Knots	ms ⁻¹					
0	0	0	<1	<1	Calm	-	-	0	Calm (glassy)
1	2	1	1-3	1-2	Light air	0.1	0.1	1	Calm (rippled)
2	5	3	4-6	2-3	Light breeze	0.2	0.3	2	Smooth (wavelets)
3	9	5	7-10	4-5	Gentle breeze	0.6	1.0	3	Slight
4	13	7	11-16	6-8	Moderate breeze	1.0	1.5	3-4	Slight -Moderate
5	19	10	17-21	9-11	Fresh breeze	2.0	2.5	4	Moderate
6	24	12	22-27	11-14	Strong breeze	3.0	4.0	5	Rough
7	30	15	28-33	14-17	Near gale	4.0	5.5	5-6	Rough-Very rough
8	37	19	34-40	17-21	Gale	5.5	7.5	6-7	Very rough -High
9	44	23	41-47	21-24	Severe gale	7.0	10.0	7	High
10	52	27	48-55	25-28	Storm	9.0	12.5	8	Very High
11	60	31	56-63	29-32	Violent storm	11.5	16.0	8	Very High
12	-	-	64+	33+	Hurricane	14+	-	9	Phenomenal

The scale was devised in 1805 by Francis Beaufort (later Rear Admiral Sir Francis Beaufort), an Irish Royal Navy officer, while serving on HMS Woolwich. The scale had a long and complex evolution from previous work of others (including Daniel Defoe the century before) to when Beaufort was a top administrator in the Royal Navy in the 1830s when it was adopted officially and first used during the voyage of HMS Beagle under Captain Robert Fitzroy, later to set up the first Meteorological Office in Britain giving regular weather forecasts. In the early 19th century, naval officers made regular weather observations, but there was no standard scale and so they could be very subjective—one man’s “stiff breeze” might be another’s “soft breeze”. Beaufort succeeded in standardizing the scale.

The initial scale of thirteen classes did not reference wind speed numbers but related qualitative wind conditions to effects on the sails of a frigate, then the main ship of the Royal Navy, from “just sufficient to give steerage” to “that which no canvas sails could withstand”.

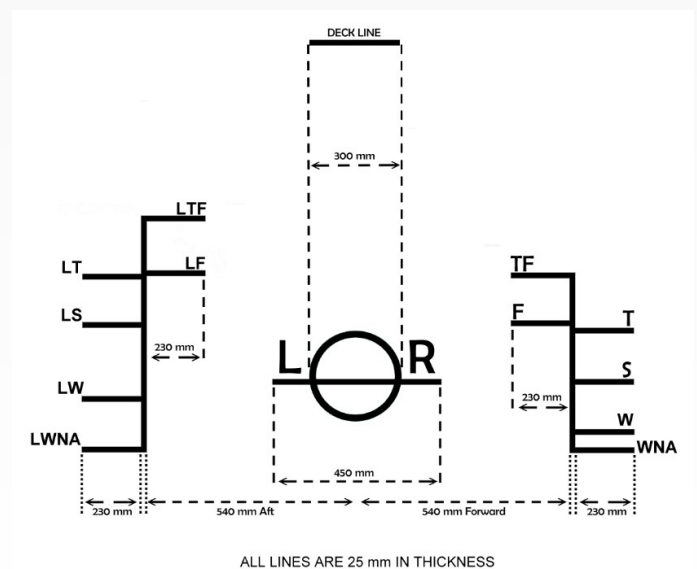
The scale was made a standard for ship’s log entries on Royal navy vessels in the late 1830s and was adapted to non-naval use in the 1850s, with scale numbers corresponding to a cup-anemometers rotations. In 1916, to accommodate the growth of steam power, the descriptions were changed to how the sea, not the sails, behaved and extended to land observations. Rotations to scale numbers were standardised only in 1923. Today, many countries have abandoned the scale and use the metric system based units, m/s or km/h instead but the severe weather warnings given to the public are still approximately the same as when using the Beaufort scale.

The Plimsoll Line

This marking was invented in the 1870s by Samuel Plimsoll and is the line where the hull of a ship meets the surface of the water, in concept or reality. Specifically, it is also the name of a special marking, also known as the International Load Line or water line (positioned amidships), that indicates the draft of the ship and the legal limit to which a ship may be loaded for specific water types and temperatures in order to safely maintain buoyancy, particularly with regard to the hazard of waves that may arise. Temperature affects the level because warm water provides less buoyancy, being less dense than cold water, as does salinity because fresh water is less dense than salty seawater. For vessels with displacement hulls, the hull speed is determined by, amongst other things, the waterline length. In a sailing boat, the waterline length can change significantly as the boat heels, and can dynamically affect the speed of the boat.

The purpose of a load line is to ensure that a ship has sufficient freeboard (the height from the water line to the main deck) and thus sufficient reserve buoyancy.

All commercial ships, other than in exceptional circumstances, have a load line symbol painted amidships on each side of the ship. This symbol must also be permanently marked, so that if the paint wears off it remains visible. The load line makes it easy for anyone to determine if a ship has been overloaded.



Role of Barges in WWI & WWII



Thames Sailing Barge Trust



Role of Barges in WWI & WWII

First World War

Barges continued to operate around the coast and along the Thames transporting the products that they were recognised for. They also played a major part in the Great War from the beginning to the end of hostilities carrying supplies from this country over to the Continent.

Bargemen were exempt from all forms of war service. Barges were ideal for travelling across the Channel as their shallow draught allowed them to navigate the dangers of the English Channel as they were able to sail over mines anchored on the bottom of the sea. In spite of the large numbers of barges involved in the war very few of them were lost through enemy action, yet as many as 180 barges were seen in Le Treport on the French coast, at one time.

The risks run by bargemen were, without doubt, considerable. However wartime work across the continent had the advantage of being very profitable and towards the end of the war when shipping costs were high, the profits made by the bargemen were really large. Wives helped with the working of the barge, often sailing as the only mate, and releasing an able man for other work at a time when the shortage of men was being felt. Mrs Charlotte Whale of Strood, Kent was the only woman entitled to wear the Mercantile Marine Medal.

Bargemen's wives also played an important part during the war. They often rallied to their husband's aid and helped. Moonlit nights were the bargemen's chief fear during the war; for it was then they ran the risk of being shelled by enemy small craft or submarines out on the prowl. But as against this, the moonlight gave them a sporting chance of spotting floating mines and altering course in time to avoid them.

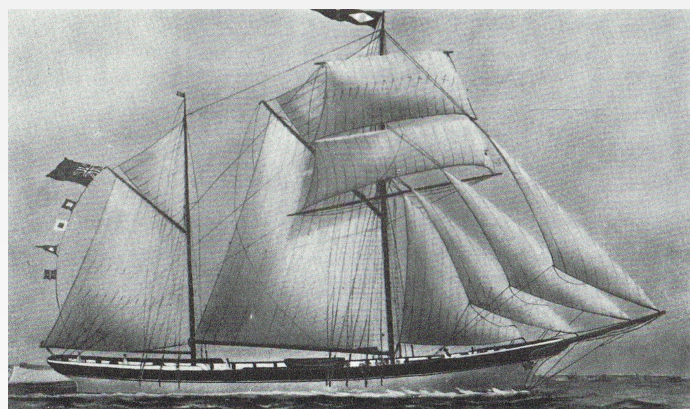
The cargoes carried by the barges during the war consisted mainly of foodstuffs and large quantities of coal, coke and pitch.

Towards the end of the war, navigation of the Channel became increasingly dangerous from submarines and more particularly minefields, and barges were kept under very strict supervision and restricted in their movements to specified routes. An elaborate system of patrol was in force, and barges would sometimes lie for days or even weeks off Southend,

in Margate Roads* or in the Downs,** before being ordered to proceed on their voyage.

S.b. Record Reign.

This was a Maldon barge which had the distinction of being fitted out as a Q-ship for submarine hunting during the latter days of the war. She was built by Howard & Son of Maldon, in 1897. She was a large barge and could carry 282 tons of stone. After being taken over by the Admiralty, two 40 h.p. Bolinger engines were installed in 1915 for special secret work. She was converted for her new duties and fitted with five guns. Of these, four were small guns, about 12-pounders, mounted on folding or collapsing mountings. Amidships she carried a much larger gun, about 14 feet long and was disguised as a barge boat.



Record Reign from a painting just after she was built in 1897. The painting is minus the barge's lee boards.

* A stretch of water near the shore in which barges can anchor.

** A stretch of water within the Goodwin Sands off the East Kent coast, a famous rendezvous point for ships.

Role of Barges in WWI & WWII

Second World War

The story of barges in the Second World War is one of hard work and hardship in conditions infinitely more hazardous for ships and men than anything they experienced in the earlier conflict. From the evacuation of Dunkirk to the last days of the war, the Thames Estuary was right in the fighting line, and the port of London the target for every means of attack.

It is a story of the unflinching courage and relentless determination of the bargemen, who sailed their craft from one target area to another, running the gauntlet on every passage as they shuttled to and fro between the frying-pan and the fire.

- ◆ Mine watching
- ◆ Balloon barrage ships
- ◆ Ammunition ships

The London & Rochester Trading Company had a fleet of 160 craft at the beginning of the war, including sailing and motor barges, lighters and motor coasters. Of these 108 were requested to work for the government.

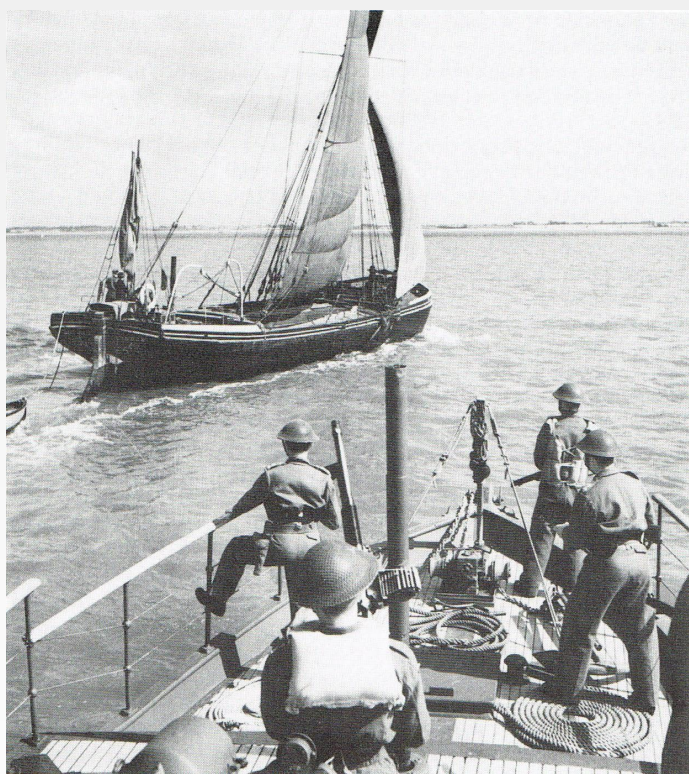
Vessels used during the war suffered because of their activities. Not only were they destroyed through enemy action, but because they were not looked after many of them grew crops of weeds on their bottoms and because of these became riddled with worms as they were not scraped regularly and given protective coatings. As a result many barges were left to rot away.

Labour

As a barge only required a team of two people to sail them and one of these could be a boy or woman, many barges served in the war crewed by husband or wife or father and son, so allowing fit and able bodied men to join up.

Dunkirk

A total of 30 sailing/auxiliary barges were involved in Operation Dynamo which was the code name for the evacuation of the British soldiers from Dunkirk in 1940. Sadly many of the barges were destroyed and a few remained stranded on the beaches unable to refloat before the arrival of the German troops. 19 barges survived the evacuation.

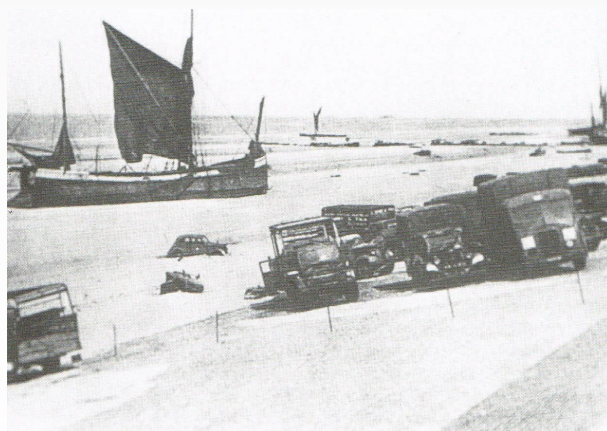


A boarding party of soldiers at West Mersea approach the Nellie Parker, in the Blackwater. Such inspections were part of the irritations of wartime life in the barges

Barge activities

Barges were used for many types of activities during the war. They continued their usual types of trade, but were used by the war department for the following activities:

- ◆ Taking stores to naval bases



Abandoned at Dunkirk the s.b. Aidie, on the left, Lark, in the centre and right Ethel Everard

Famous Barging People of the Dengie



Thames
Sailing
Barge
Trust



John Granger Sadd 1851-1900

Information Sheet **II**

Famous Barging People of the Dengie

Clement Wright Parker

Clement Wright Parker was one of the more important sailing barge owners in and around the Dengie. He was born in July 1864 to John and Matilda Parker who ran the Green Man Public House at Waterside which was the area of Bradwell on Sea where the dock was situated. As well as being a publican John Parker was a coal merchant and barge owner which gave Clement the chance to get to know barges as he grew up.

One day Clement was to make sure the crew of a barge were taking advantage of a fair wind and a good tide to get away from Bridgewick Outfall. They had not turned up, so Clement collected a boy from the farm to help him lay off and blew out into the fairway. He was seventeen years old at the time, and as the wind was fair for London he decided to make a day of it. The next his father heard from him was a wire from Woolwich asking where the stack (hay) was to be delivered.

Clement followed into the family business as an assistant Coal merchant and in 1887 he married. Clement set about expanding the family empire by building a fleet of barges operating from Bradwell Quay.

Clement always liked to keep an eye on his barges from his home and he insisted that his barges were kept very smart. His fleet had black woodwork picked out in yellow with a grey deck and white quarter boards. Parker's blue flag containing a white hand on a red heart became one of the best known flags in the Blackwater. The hand with the heart was a symbol of the Oddfellows Friendly Society which at the time had a large membership in Bradwell on Sea.

Most of the trade was to carry hay from the farms of the Dengie Hundred to ports on the English Coast although London was the most common destination. When they were used for this purpose the barges were often nicknamed as Stackies. Often so much hay was loaded that little of the barge could be seen and the boy was required to sit on top of the hay to see where the barge was steering.

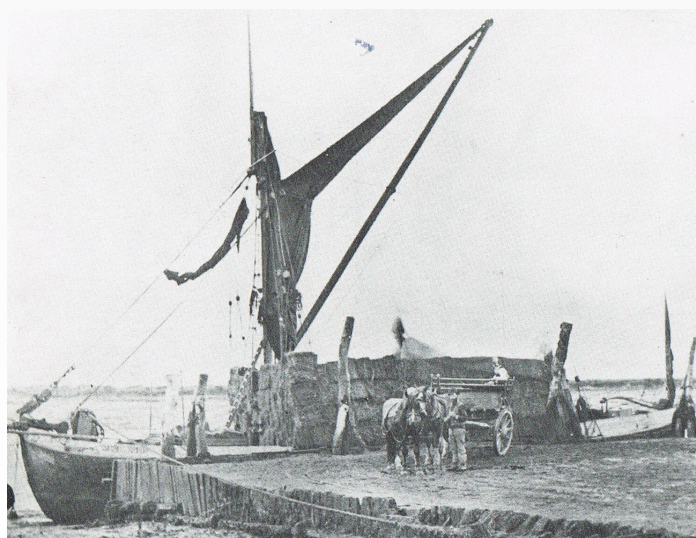
Parker's barges would carry anything anywhere including grain and coal or coke which was part of the family business as coal merchants. The barges also made trips across the channel to France as part of their business with local ru-

mour having that Parker expected his skippers to bring him back a foreign treat such as cigars, perfume or brandy without worrying the Revenue men who also used Bradwell Quay as a base.



Parker's barges at Bradwell

His business was successful as evidenced by the report in the Essex County Standard of a large party held on 7 October 1899 at which his daughter Nellie launched the latest new barge at the dockyard in Ipswich. The 140 ton barge was named the *Nellie Parker* and joined the Parker fleet to carry hay, straw and general cargo in the coasting trade. Amongst the barges in the fleet were:- Champion, Daisy, Dover Castle, Duchess, Fanny, Lord Warden, Nellie Parker, Princess, Strood, Triton, Veronica, Verona, Victa, Violet Sybil and Water Lily.



A 'stackie' barge at Bradwell

Famous Barging People of the Dengie

On 20 March 1923 Clement died. His estate of the considerable sum of £30,079 7sh 3d was left to his wife. Clement's death coincided with the end of the golden era of sailing barges and within a few years all of the barges had been sold. Many of the Parker barges continued with trade.

John Sadd & Son Ltd

The town of Maldon has for centuries been connected with the timber trade. It is on record that the prefabricated timber-frames used in the erection of a row of houses in Rood Lane, London, in 1505 were made by carpenters at Maldon. In view of the rudimentary road system which existed in the country in those days, these timber-frames must have been transported to London by water. It is an interesting little coincidence that some three centuries later, the John Sadd of the day, head of a flourishing Maldon timber works, ran a regular weekly packet service by sea from Maldon to London, and found enough trade in the venture to fill his ships. Some of the timber used in those early frames was imported from the Baltic, and as Maldon at that date was quite an important port, it is a clear inference that this timber was imported direct.



Sadd's yard Maldon

John Sadd & Sons Ltd the timber and builders' merchants, was trading in Maldon from as early as 1729. Sadd's was, until quite recently, a leading firm in the town, importing timber from Europe and, at one time, slate from Wales and supplying cement, lath and Stockholm tar to the trade. They were also corn merchants, warehousemen and early provid-

ers of Maldon's electricity (which they generated by burning vast amounts of their sawdust!). So successful were they that they became the second biggest employer in the area.

From 1831 their busy saw mill, wharfs and sheds were established on the north side of Fullbridge, where their own fleet of sailing barges (complete with distinctive blue and white house flags, or 'bobs' aloft) off-loaded countless cargoes.

The Sadd barges included the Maldon built 'James & Harriet' (1864), 'Oak' (of 1881) and 'Cypress' (1887). They also had the 'Falcon' (built in Paglesham in 1868) and, after 1919, the 'Record Reign' (Maldon 1897).

John Granger Sadd was a remarkable man. Not only had he inherited the business instincts of the five John Sadds who had preceded him and who had built up the firm from its beginnings in Queen Anne's reign as a small carpenter's shop into a large prosperous business, but he had in addition a spirit of adventure and farsightedness which was to revolutionise the firm and lift it into the forefront of the timber trade.

John Granger Sadd devoted a lot of his time and energy to the town of Maldon and he was elected to the Town Council in 1855 and in 1876 became an Alderman. In 1880 he was created a Justice of the Peace and became one of the original members of the Essex County Council when it was formed.

John Granger Sadd's first act after taking over the management of the firm was to install a sawmill with steam-powered machinery in place of the old saw pits. Further mechanisation of the works followed, and gradually the carpentry side of the business was allowed to die out in order to concentrate more fully on the supply of sawn and planed timber to the building trade. With the growth of goods traffic carried by the rapidly developing railway system, the weekly packet service to and from London was also allowed to die and most of the ships were sold. A fleet of barges and lighters was, however, retained to transport to the works at Fullbridge cargoes of timber imported from abroad.

In the 1800's the business became so successful that it was

Famous Barging People of the Dengie

decided the firm should become a limited company so the partnership operated as John Granger Sadd became John Sadd & Sons Limited on the 23rd July 1889 with all the shares owned by the Sadd family.



The unloading gang, aboard a vessel moored at Sadd's wharf in 1937. They were responsible for carrying lengths of timber, balanced on their heads, up the angled gangplanks, from the holds of barges and coasters to the stacks seen in the background

The business continued to grow and expand. Around 1910, after a major fire, a scheme of electrification took place, to replace the old steam saw mill. As part of the success of this, in 1912 electricity from the works was available throughout the whole of Maldon and Heybridge. The whole electricity supply of Maldon and Heybridge was provided by the firm until 1931.

Barges were key to their business and from 1921-1936 the firm even sponsored a challenge cup as part of the annual Maldon Barge Race.

Always astute in their business dealings, their houses, including 'Mount View' in London Road and 'Hill House' on Market Hill were equipped with belvederes to enable regular observation of their Fullbridge works, the barges and other river traffic.

During the war years 1939-45 with their sawmill working 24/7, the company was building for the war effort: motor torpedo boats, Fairmile type motor launches, air-sea rescue craft, pontoons, small assault craft, motor fishing vessels, aircraft parts, flight cooking and messing boxes just to name a few.

From 1960-1980 John Sadds were the second largest employers in the town. However, all that came to a sad end when on Monday 3rd October 1994 the Boulton and Paul Group purchased John Sadd & Sons, although the company had been trading under the Boulton and Paul banner for some time.

On Friday 7th October 1994 the name of John Sadd & Sons Limited went for good when officially the name changed to Bolton & Paul (Manufacturing) Limited.

The whole site was demolished shortly afterwards.

Ecology of the Blackwater



Thames
Sailing
Barge
Trust



Information Sheet

12

Ecology of the Blackwater

The Blackwater Estuary has an amazing diversity of habitats: shingle spits, sea walls, borrow dykes, estuarine marshes and huge areas of saltings as well as the muddy inter-tidal waters, a fantastic feeding ground for so many species of invertebrates, crustaceans and birds.

Salt Marsh

Salt marsh vegetation is a distinct habitat with specific plant species which spend their lives being continually bathed in salt water. The formation of a salt marsh extends upwards from levels which are just about reached at neap tides (tides of least range) to areas which are reached by the highest spring tides (tides of greatest range). The plants growing on a salt marsh are known as halophytes. They absorb large amounts of salt into their cell tissue so they become in equilibrium with their surroundings. Salt marsh formation is zoned depending on the amount of time the species are exposed to salt water on a regular basis. Plants such as *Zostera*, a favourite of Brent Geese, grow where they are covered by water every day. This is followed by spartina grass, glasswort and rayless sea aster – pioneer plants covered regularly; sea purslane and common salt marsh grass - covered fairly regularly. Then comes sea lavender, red thrift, scurvey grass, sea wormwood and annual seablight – found normally on the drier parts of the salt marsh.

Sea walls alongside a salt marsh have yet a different range of species as do the shingle spits with phragmites communis, our tallest grass, along edges of the borrowdykes.

Birds of the Blackwater Estuary

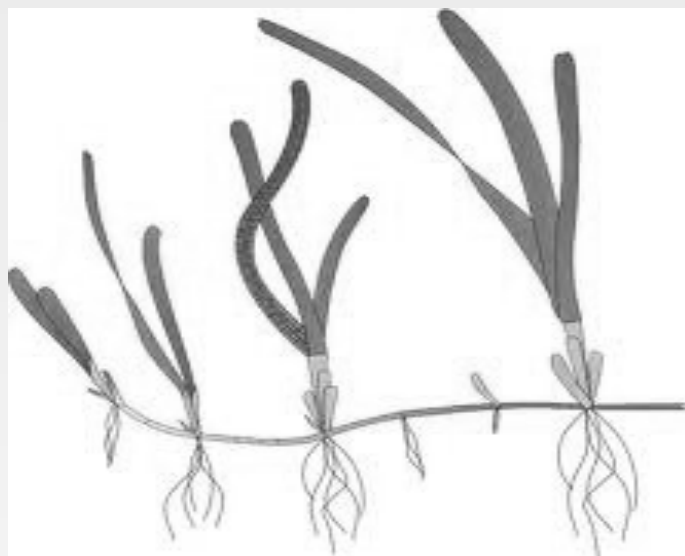
Beneath the surface of the mud is often densely colonised by rag worms and cat worms which emerge to feed when the tide is in and the cast-forming lugworm. These are rich pickings for shoreline waders.

Internationally important birds to be found on the Blackwater:

Dark bellied Brent Goose, Golden Plover, Grey Plover, Dunlin, Black-tailed Godwit

Nationally important: Cormorant, Shelduck, Widgeon, Teal, Pintail, Avocet, Knot, Curlew.

Also: Tern, Oystercatcher, Ringed Plover, Little Egret, Grey Heron



Zostera marina is found on sandy substrates or in estuaries submerged or partially floating. Most *Zostera* are perennial. They have long, bright green, ribbon-like leaves, about 1 cm wide. Short stems grow up from extensive, white branching rhizomes. The flowers are enclosed in the sheaths of the leaf bases, the fruits are bladdery and can float



Dark Bellied Brent Goose

Barging Trades



Thames Sailing Barge Trust



Barging Trades

Barge Building

John Howard

John Howard had a flourishing Barge Yard at the bottom of North Street in Maldon later occupied by Dan, Webb & Feesey, and where Maldon Chandlery now run their business. It was ideally situated for building craft as large as barges. The area was covered by two large spans of roof in the style of present day Dutch barns. These provided good protective cover for barge building and there was room for as many as four to be under construction at once. The gently sloping ground down to the river posed no problems in the matter of launching. Howard was one of the few barge builders who worked from plans and his house, office and workshop can be still be found at the bottom of North Street. John Howard turned out some beautiful craft some of which remain today but it is said that his struggle after perfection took him into financial difficulties more than once. Barges built by Howard include Venta, Mermaid, Percy and Violet, the stackie barge Ethel Maud and the Ready, now called Mirosa and Edith May both of which are still sailing today.

galvanised spikes for barge building, smaller wooden boats under construction, wooden planks piled up ready for use, wooden boat building moulds – all covered in a fine layer of wood dust.

Outside oak frames would be sawn out in the saw pit, which is now covered over but was situated outside the big doors of the shed. A drawdock, looking rather like a very large muddy pool was used to store timbers to keep them supple. Blocks, to sit barges on for repairs, and the campshed where barges were built, lay parallel to the river and still exist today.

Walter Cook worked for Howard and other barge builders and thus learned the skills of barge building. In 1894 James Keeble, a Maldon entrepreneur, encouraged Walter



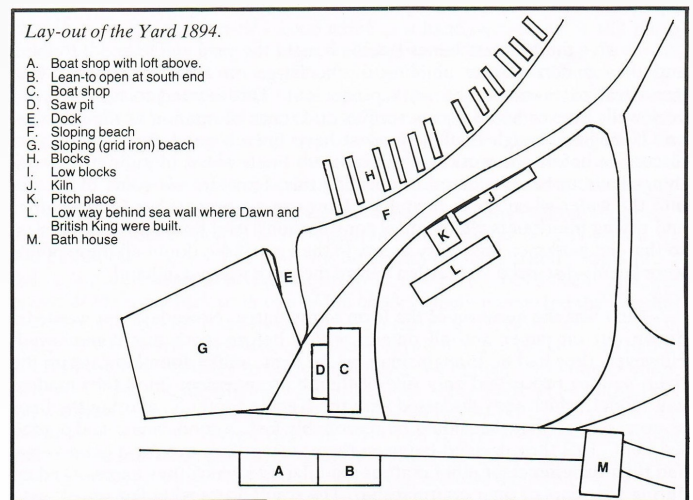
An early picture of Cook's Yard Maldon



Barge being planked

Walter Cook & Son

Tap tap tap – the noise became louder the nearer one came to Walter Cook & Sons old boat building shed which still stands on the Hythe. Inside could be seen large sacks of



Barging Trades

to take over the old “Finch’s” yard, a shipyard already located at the Hythe and its junction with the Bath Wall, by giving him an order to build a barge. So Walter went into partnership with Arthur Woodard (another shipwright who had worked for Howard) and thus ‘Cook & Woodard’ was established. They had no draughtsman experience, so they proceeded on a ‘rule of thumb’ arrangement by first building a half model – as did most other barge builders at that time. Thus the Dawn, their first barge, was designed and built. She had to be launched sideways and to do this they removed the top of the sea wall which existed at that time. Afterwards orders were received for other barges including Lord Roberts and the British King. In 1907-8 the partnership of Cook and Woodard was dissolved. Arthur Woodard carried on with barge repairing while Walter Cook concentrated on boatbuilding, especially the construction of 27ft Whalers which they built for the Admiralty.

Between the Wars

Between 1919 and 1938 a good deal of work was carried out in Cook’s Yard in repairs to local sailing barges. By this time most of the barges were at least 20 to 25 years old and were beginning to ‘come into their wants’ as they say. Between 1920 and 1923 the yard carried out at least ten major repairs.

After WWII

Soon after the cessation of hostilities there came an important development in the economy of coastwise trading vessels. Up until that time, practically all the barges had been relying on their sails for propulsion, but with the development of the diesel engine more and more barges began

to have engines fitted. Clifford Cook, who had spent all his working life in the business with his father took over the running of Cook’s Yard completely. Less and less barge work was then available as lorries took over freight-carrying from barges. When he retired, barge enthusiasts kept the Yard alive – firstly Gordon Swift and Barry Pearce, followed by Roger Becket. It’s now the base for Topsail Charters and the barge blocks are still in constant use.

Sail Making

In the late 1980’s Joseph Sadler, sailmaker, moved from Heybridge to Maldon. He took over the lofts, formerly a granary, next to Howard’s yard. During World War I Arthur Taylor bought the business from him and later Fred Taylor succeeded his father. At one time Arthur Taylor & Sons was the only place on the east coast where traditional sailmaking was carried out. The cut of a sail for working craft requires ‘belly’ to give it driving power which is quite different from the sails of modern yachts. Books of these sail plans were always carefully guarded.

Initially all sails had to be hand sewn, but even with the introduction of machine sewing it was still a laborious and skilful craft. The average barge’s mainsail takes about 90 man hours to make. Properly dressed with red ochre and fish oils they lasted for decades. Each sail was individually made for each craft.

As Taylor’s Yard was formally a granary, it was very dark inside, but doorways previously used for loading and unloading vessels on the river could be opened up to give some daylight to the sailmakers working in the loft. The huge floor was smooth and shiny from the dressed sails being dragged over the boards leaving their traces of ochre and cod oil. Rolled up red sails for barges and yachts were neatly piled up round the edge waiting for collection. A workbench near the door was used for wire splicing with its own huge iron vice. When making up the cringles on a sail, which was done by hand, the sailmakers would sit on a special bench with the sail draped round them. Their tools were all to hand, stored in purpose made slots at the end of the bench.

Outside, between the Loft and the Queen’s Head public



Joseph Sadler Sailmakers’s business at Heybridge

Barging Trades

house was the sail dressing lawn. A lean-to sheltered two hand carts which were used to deliver the parcelled-up mainsails to barges on the quayside

The sail loft also had a general ship's stores which stocked galvanised dip buckets, lamp glasses for the Tilley lamps or riding lights used on board the barges. Wooden shelves contained coils of wire, pots of linseed oil and Stockholm tar. Rope was measured out with a long wooden rule made out in fathoms and was sold by weight using scales.

Sadler's loft was rivalled in the 1880's by sailmakers John Bruce Low, also at the Hythe and James Heale in Cross Road.

There are no sailmakers in Maldon now, the nearest being James Lawrence Sailmakers at Brightlingsea.

Blacksmiths

There were several blacksmiths operating along the river including one which was part of Howard's yard. They made up the ironwork for the barges.

In earlier times Maldon had a ropewalk where men spun hemp and manilla into cordage and rope and along the Hythe close to Cook's barge yard, the little shed of W. Burch, 'Shipsmith and block maker' stood.



Jim Lawrence sailmaker sewing a cringle sitting on his sailmakers bench

Barge Racing



Thames Sailing Barge Trust



Barge Racing

The spirit of rivalry and the love of racing have always existed amongst the bargemen, and whether loaded or light, barges sailing together on a tide would always 'have a crack' at one another. Few bargemen liked to be passed under way and the impromptu spats were part and parcel of a day's sailing to them and added interest to life on the waterways – hence the unofficial beginning of barge racing.

The First Barge Race

It was not, however, until the year 1863 that barge racing was put on an organised footing by the enthusiasm of Mr. Henry Dodd of London, known to many as 'the Golden Dustman'. Mr. Dodd, a prominent contractor, both initiated and generously financed the first Barge Match which was held on the River Thames. His aim in originating these Barge Matches was not only to produce sport but also to encourage improvements in the build and the equipment of the barges and to improve the status of bargemen themselves. Bargemen at that time were not regarded with the degree of respect which their calling as master mariners and mates should have entitled them to receive. The first race in 1863 was so successful with its generous cash prizes to the crews and grand silver cups for the owners, that in 1864 no fewer than 40 barges competed.

Barge racing on the Thames went through some ups and downs throughout the years and stopped completely during WWI. Racing was started again after the war but it folded again during WW2. One famous barge which raced on the Thames was 'Veronica' owned at one time by Clement W. Parker of Bradwell Quay.

The idea of barge racing was so well received that other rivers along the East Coast decided to have their own races, albeit not so grand or with such lucrative prizes as the Thames Match.

Early Races on the River Blackwater

Racing on the River Blackwater was started a few years after the Thames Match and by the 1870's was well underway, but sadly no records seem to have been kept. The earliest record found at this moment is a report in the local newspaper the 'Maldon Express' of a race which took place on Wednesday 18th September 1872 when s.b. James and Har-

riet (built 1864) was the winner and s.b. Minerva runner up. There is also a verbal account by one George Hales of a Match held in the early 1890's. The start was from the Promenade and the winner the little Morning Star.

These races continued to be run from time to time, but lapsed completely during WWI. In 1921 they were revived by John Sadd who put up a Challenge Cup for the winner. The start line was off Heybridge Basin, but was later moved to a point just off Mill Beach. The route then took the contenders to Goldhanger Creek, before a return to the finishing line off the Promenade. It was a short race, but planned to get the most spectators. Races lapsed again during and after WW2 when times were hard for the country and barges in particular.

A New Beginning for Barge Matches

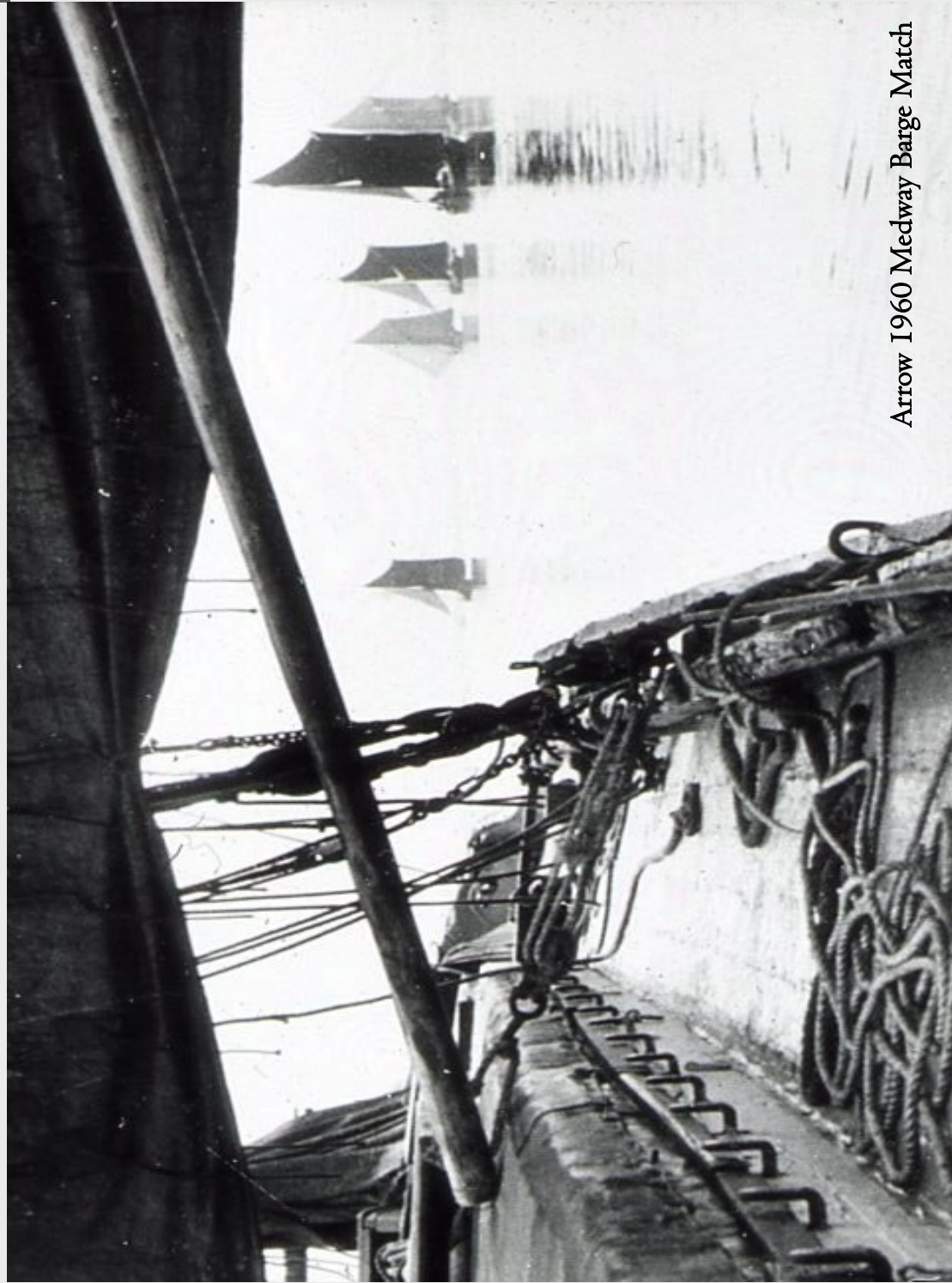
However, in November 1961 a group of enthusiasts gathered in the bar of the 'Jolly Sailor', at Maldon's Hythe quay, to plan what would be the re-introduction of a most special maritime competition - The Blackwater Barge Match. Its aim was to encourage enthusiasts to race, care for and preserve the remaining barges left for as long as possible. On Saturday the 7th July the following year 14 barges took part in the newly revived Match with s.b. Marjorie (1899) the victor, ahead of s.b. Spinaway C (1899) and s.b. Memory (1904) in third place. Thanks to those dedicated individuals and their committee successors, the Blackwater Barge Match has continued to be held annually, without a break, for over 50 years now.



Thames Sailing Barge Trust



Thames Sailing Barge Trust



Arrow 1960 Medway Barge Match

Thames Sailing Barge Trust

The Trust was previously a private members' club 'THE THAMES BARGE SAILING CLUB', formed by a few enthusiasts who realised that they were witnessing the end of sail on London River (the Thames). Barges had been the workhorses of the river, trading into the estuary, around the coast, across the Channel and survived the 1939-45 war to become the last coastal sailing cargo vessels trading in the United Kingdom.

In 1948 the Club was formed with Frank Carr, then Director of the National Maritime Museum at Greenwich as its first Commodore. By 1963 the ageing club barge Arrow was replaced by Ashphodel and the Club was given Westmoreland

In 1968 Pudge was acquired straight out of trade as a motor barge. The members converted her back to sail and later acquired the one-time charter barge Centaur. A lengthy restoration and rebuild of Centaur was carried out. The Club evolved into a small chartering company run, crewed and maintained by volunteers.

With the closure of the London Docks in 1982 the Club sought a new base, leaving the London River for Maldon on the River Blackwater.

Members undertake much of the routine maintenance of the barges and the club has trained many of its volunteer Skippers and Mates to carry on the traditions of the 'Sailormen'.

The Club transformed itself into a Charitable Trust in 2003 and as the TSBT continues to be run by volunteers.

For further details, visit www.bargetrust.org or contact David Gibson on 07840 862685

Registered Charity Number 1102840; A company limited by guarantee registered in England & Wales no. 04726591

Registered Address: Thames Sailing Barge Trust, 8 Birch Close, Ely, Cambs CB7 4TJ

Bibliography

Information Sheet I Introduction

Stephen Nunn
Independent Historical Consultant for the Maldon District
Deputy Town Mayor of Maldon

Information Sheet 2 History of Centaur

Thames Sailing Barge Trust
(Website) www.bargetrust.org
National Historic Ships
(Website) www.nationalhistoricships.org.uk
Centaur Commemoration of a Centenary TSBT
(Book) ISBN 0-9525 47406

Information Sheet 3 Local Industries

Maldon Sea Salt Information Sheet
The Salt Makers of Maldon by Gillian Soudah
(Book)
Maldon Salt Company
(Website) www.maldonsalt.co.uk
Blackwater Men by Michael Emmett
(Book) I-8701 I2172
Essex Gold by Hervey Benham
(Book) 0-9003 60925
The Salty Shore by John Leather
(Book) ISBN 0-9542 75012
East Coast Digest (various editions)

Information Sheet 4 Thames Barges as Transporters

Sailing Barges by Frank G.G. Carr
(Book) ISBN 0-8613 80606
Sailing Barges by Martin Hazell (A Shire Album)
(Book) ISBN 0-7478 0492 3
BBC Britain's Lost Routes by Griff Rhys Jones
(DVD)

Information Sheet 5 Victorian Building in the Industrial Revolution

Bricks and Brickies by F. G. Willmott
(Book)
Brick in Essex by Patricia M. Ryan
(Book) ISBN 0 -9529 03903

The Foundry at Burnham by John Booth
(Book) ISBN 0 -9528 68806
Essex Family History
(Website) www.essex-family-history.co.uk

Information Sheet 6 The Design of the Thames Sailing Barge

Sailing a Thames Sailing Barge by Peter Hearn (TSBT)
(Book)
Handbook of Sailing Barges by F.S. Cooper
(Book) 0-2296 42322
The Thames Sailing Barge by Roger Beckett
Wikipedia

Information Sheet 7 Sailing a Thames Barge

Sailing a Thames Sailing Barge by Peter Hearn (TSBT)
(Book)
Handbook of Sailing Barges by F.S. Cooper
(Book) 0-2296 42322
The Thames Sailing Barge by Roger Beckett

Information Sheet 8 Transport on the Dengie

A Popular History of the Dengie Hundred by M.J. Ayres
(Book) ISBN 0-9522 95318
Essex Family History
(Website) www.essex-family-history.co.uk
Chelmer Canal Trust
(Website) www.chelmercanaltrust.co.uk
Branch Line to Southminster by Dennis L. Swindale
(Book)
Maldon and the Dengie Hundred by Patrick Lacey
(Book) ISBN 0-7524 24874

Information Sheet 9 Navigation and Communication

Seamanship Notes by Kemp & Young
(Book) 9-7808 5309044I
East Coast Rivers by Jack H. Coote
(Book) I-8527 71461
Coastwise Navigation by G.G. Watkins
(Book) 9-7805 40072668
Wikipedia

Continued overleaf.

Bibliography

Information Sheet 10

Role of Barges in WWI and WWII

Sailing Barges by Frank G.G. Carr
(Book) ISBN 0-8613 80606
Sailing Barges The Dunkirk Story by Barbara Butler
(Book) ISBN 0-9926 18209
Thames Sailing Barge Trust
(Website) www.bargetrust.org

Information Sheet 11

Famous Barging People of the Dengie

Essex Family History
(Website) www.essex-family-history.co.uk
The Salty Shore by John Leather
(Book) ISBN 0-9542 75012
The Continuing Years by Lt.-Commander P.K. Kemp
(Book)

Information Sheet 12

Ecology of the Blackwater

Wikipedia
The Sea Coast by J.A. Steers (Collins)
(Book) 0-9780 002132046
The Concise British Flora by Martin W. Keeble
Salt Marsh Vegetation by P. Boss (1974)

Information Sheet 13

Barging Trades

Maldon Riverside by Barry Pearce
(Book)
A Barge on the Blocks by Joan Cook
(Book)
Us Bargemen by A.S. Bennett
(Book) 0-9052 70207
Last Stronghold of Sail by Hervey Benham
(Book) 0-2455 37848

Information Sheet 14

Barge Racing

Racing Sailormen by F.S. Cooper
(Book) 0-2296 4232
Sailing Barges by Frank G.G. Carr
(Book) ISBN 0-8613 80606
Down Topsail by Hervey Benham
(Book) 0-2455 06616

Information Sheet 15

Thames Sailing Barge Trust

Thames Sailing Barge Trust (TSBT)
(Website) www.bargetrust.org
The Golden Chaffcutter by David Wood (TSBT)
(Book) Available from Thames Sailing Barge Trust

Other useful areas for information

Society for Sailing Barge Research
www.sailingbargereseearch.org.uk

Thames Barge
www.thamesbarge.org.uk

Contributors:

Pat Boss, Thames Sailing Barge Trust

John Rayment, Thames Sailing Barge Trust

Beryl Haisman-Baker, Thames Sailing Barge Trust
and Education Consultant

Stephen Nunn

Independent Historical Consultant for the Maldon District
Deputy Town Mayor of Maldon

Education Packs produced by the Thames Sailing Barge
Trust with the support of the Heritage Lottery Fund



LOTTERY FUNDED