# GEO
# Geological Collection
# Late Triassic-early Jurassic

## Administrative and biographical history / Object history and association

The collection of fossils held by the Alfred Gillett Trust was acquired primarily through the efforts of Alfred Gillett and members of the extended Clark family, as well as through connections with the geologist Henry Woodward (1832-1921) and the Natural History Department at the British Museum (later the Natural History Museum).

Alfred Gillett (1814-1904) came from an established Somerset Quaker farming family and was the second son of Martha Isaac (1784-1868) and John Gillett (1785-1861), with five brothers and four sisters. John Gillett was born in Somerton, the only son of shopkeeper Joseph and his wife Sarah Gillett. Martha Isaac was the daughter of William Isaac (1747-1814), tanner of Sturminster Newton, and his wife Elizabeth Clark (1753-1789), elder sister of Joseph Clark I (1762-1831). Via this maternal grandmother, Alfred was a cousin once removed of Joseph Clark's shoemaker sons Cyrus (1801-1866) and James Clark (1811-1906), partners in C & J Clark Ltd. Alfred was doubly related to the Clarks as Cyrus's and James' brother Joseph Clark II (1799-1877) was married to Martha Clothier Gillett (1803-1852), a relation of John Gillett. Alfred's sister Maria Gillett (1816-1909) was the wife of Thomas Simpson of Manchester (b 1812), who was appointed by Quaker family arbitrators in 1863 to supervise William Stephens Clark's management of C & J Clark Ltd. (Another sister Ellen married Thomas's brother William Simpson of Manchester, printer).

John Gillett was a grocer, druggist and draper in Langport who came to Street in his retirement with his family (his son William Gillett (b 1825) eventually took over the family business in Langport). Here John immediately rebuilt Overleigh House, formerly a farmhouse to the south of Street village, and became an elder at the Quaker Meeting House. Alfred spent his formative years at Overleigh, later training as a farmer with cousins at Long Sutton and then working as an ironmonger in Yeovil for many years. Alfred is listed in the 1841 census as an ironmonger resident at Overleigh in Street, but in 1851 and 1861 censuses he was resident at Josiah Hannam's house in Yeovil as a partner in Hannam's High Street ironmongery business (Francis Gillett from Street is listed as an assistant in 1841). Alfred retired to Overleigh in 1866 and lived there alone until his death in 1904, when the house was taken over by his cousin John Bright Clark (1867-1933). He left an estate worth £28,496 and his executors were Albert Simpson Esq and John Alfred Gillett, grocer.

Alfred Gillett was able to indulge his passion for fossil-hunting throughout his long retirement, taking advantage of the expansion in quarrying in Street that had developed during the early 19th century to the west, east and south of the village. Mary Anning had discovered the first ichthyosaur and plesiosaur specimens from rocks of the Blue Lias at Lyme Regis, Dorset, in 1810 and 1821 respectively. Quarrying for building materials and lime burning in Street revealed similar marine reptiles contained within the lower strata.

Several members of the wider Clark family took an active interest in collecting. Thomas Clark the elder (1759-1850) of Overleigh Farm, his inventor son John Clark (1785-1852) and their cousin Joseph Clark III (1840-1928) all personally knew

Thomas Hawkins (1810-1899), a local man who became one of the most active collectors and experts on marine reptiles in the UK, with Thomas Clark jr (1792-1864) collecting fossils locally in c 1822-1823 for pioneer geologist William Conybeare (1787-1857). As early as 1827, Thomas Clark noted that Cyrus Clark (1801-1866) had found a fossil at a quarry locally at his house in Street and another ichthyosaur skull was found locally in 1830. Cyrus's younger brother James Clark (1811-1906) also collected large ichthyosaur specimens out of a quarry which he owned personally, and these were viewed by the newly formed Somerset Archaeological and Natural History Society in 1859 at James' house Netherleigh in Street alongside specimens belonging to local quarryman Josiah Seymour of Moormead. Other local quarries generating marine reptiles were owned by John Crees and William Pursey and worked by local families including the Underwoods, Nutts, Higgins, Lamperts and Georges.

Such was the local and national interest in the Street fossils that the Geological Association visited Alfred Gillett's collection in Street in 1868 and the Somerset Archaeological and Natural History Society visited Gillett's collection whilst on temporary display at Glastonbury Town Hall in Aug 1880. James Clark's eldest son William Stephens Clark (1839-1925) provided a room and show cases for Gillett's collection in the newly built Crispin Hall: this was the Street Club and Institute and was in effect the Mechanics' Institute for workers from C & J Clark Ltd, providing adult education classes as well as a reading room and gymnasium and other social amenities. William Clark was the Club's President at the time and he attended the official opening of the Geological Museum on 29 Apr 1887 which was widely reported in the local press.

Gillett's friend Dr Henry Woodward (1832-1921), FRS, FGS, Keeper of Geology from 1880 at the British Museum, attended with his wife and gave a formal address (Woodward's son Martin was a close friend of William Stephens Clark's sons John Bright Clark and Roger Clark and was a regular summer visitor to Street until his early death in 1900). At the museum opening, Gillett handed ownership of his collections to the Crispin Club and Institute. He also noted the contribution of fossils and other curiosities from the British Museum, Dr Henry Woodward, Dr George Jennings Hinde (1834-1918) (geologist husband of William's younger sister Edith Clark (1852-1943)), James Clark, Josiah Seymour and John Gillett.

Academic and local interest in Street lias continued. Alfred Gillett's best quality find was an ichthyosaur from Street uncovered in c 1874 which was presented to the Natural History Museum as specimen R.498 in 1884 (Lydekker 1891). The UK Geologists' Association visited the Mendip Hills in Aug 1890 which included a guided tour of the Geology Museum and tea with Gillett at his home Overleigh. The newly formed Street Urban District Council chose the ichthyosaur as their symbol in 1894 and it is still used by local societies and associations.

With Gillett advancing in years, he set up a deed of gift on 5 Oct 1900 to promote local interests in geology and to maintain the geology museum. The first trustees of the Alfred Gillett Trust were William Stephens Clark, his youngest brother Frank (1853-1938) and sons John Bright and Roger Clark. However, quarrying declined and ceased locally and local building stone increasingly replaced by brick. With some local quarrymen taking up the trade of shoemaking, no new specimens were found

and no additions made to Gillett's collection. Interest in it apparently waned further after WW1 and some of the collections may have been dispersed at this time.

However, the Trust employed a museum curator employed during the 1930s, a Miss Barbara Gullick BSc who re-arranged the collection in 1934, including John Clark's Latin Verse Machine 'Eureka', as well as stuffed birds, shells, flint implements and other collections and some 'bygones' loaned from Taunton Castle. In 1937, Street Club and Institute handed ownership of the fossils to the Crispin Hall Trust. At this point, the museum considered whether to keep or dispose of non-local material such as the American fossils and New Zealand Dinornis bird bones, and the curator subsequently arranged transfers of materials with Bristol Museum and the British Museum who donated new collections of coral and brachiopod specimens. Cato Clark was appointed Honorary Curator in Aug 1948 following the departure of Gullick.

With museum attendance at a low point, Roger Clark remained the only living trustee. He appointed Bancroft Clark and Bancroft's wife Cato, his cousin Anthony Clark and his daughter Mary Clark (later Lovell) as new trustees in Jun 1940. Roger, Bancroft and Cato took advice from Dr F Wallis, Keeper of Geology, Bristol Museum, during 1947 and 1948. The family eventually took the difficult decision to close the museum and to use the space (as originally intended in 1885) for Street Youth Club. The Geological Museum closed in Jan 1948, with the final visitors recorded as Mrs Cato Clark and her children Petronella, Sibella, Richard and Daniel.

Non-local material (minerals, non-local fossils and foreign shells) from the museum was apparently given to Bristol City Museum and Bristol College of Art in early 1948. The 'bygones' material from Taunton was returned to the Castle to Harold St George Gray (now Museum for Somerset). Dr M L K Curtis of Bristol Museum advised on the collection of large reptiles and smaller specimens retained in Street in 1948 and again in 1958 when more material (fossils found on Clarks premises in Shepton Mallet in 1959 and Egyptian pottery belonging to the Clothier family) was transferred to Bristol Museum.

In 1963, further discussions about disposing of the remaining collections in Street took place, alongside proposals to set up a new Clark museum and a new museum trust. By this point, the original Alfred Gillett Trust was largely dormant, with the smaller specimens housed in store and the large marine reptiles still bracketed to the walls of the table tennis room in Crispin Hall. On the advice of Dr Wallis, the 14 large specimens were removed from the Crispin Hall into store in 1964, alongside three fossils formerly housed at Netherleigh and Street Farm. The larger specimens were checked by Dr Curtis in 1964 and 1965, and Dr Appleby (Leicester Museum and University of Wales) viewed the collection in 1964 with an eye to possible purchase for the British Museum. J B Delair, Director of Caledonian Land Surveys Ltd near Oxford, was invited by Stephen Clark to visit the collection in Jun 1968, listing the large 19 marine reptiles for the first time. At Delair's recommendation, conservation issues were addressed by Mr R Croucher of the British Museum (Natural History). Croucher first visited the collection in Aug 1968 and proposed a programme of on-site and off-site repair, remounting and new stands, along with creating a photographic record of the collection. Prior to the employment of Elaine Dyer as curator in Oct 1969, Petronella Clark cleaned the collection in Jan 1969 on the advice of A E Rixon, British Museum (Natural History). Croucher completed his work in 1973 under Dyer's supervision.

C & J Clark Ltd set up a new Shoe Museum in 1974 but this did not include the fossil collection which remained in store, with the exception of a brief temporary exhibition at the Bear Hotel in Jul and Aug 1978: J B Delair wrote a small exhibition leaflet. Although family discussions to set up a new Alfred Gillett museum and archive trust took place at this time and into the 1980s, this was not achieved until 2002. In the meantime, a dedicated archive building was established in Street in 1978 and additional storage space rented at Anglo Trading Estate, Shepton Mallet, from 1979. The fossil collection was once again the subject of further conservation work by Crouch during 1979, additional cataloguing work (small specimens) by Dr Curtis in 1980 and a formal collection report by Dr Mike Taylor of the Area Museum Council for the South West in Oct 1984. In 1988, Dr Peter Crowther, Bristol Museum, photographed the collection.

In 1991, the Clark family agreed to use the existing Alfred Gillett Trust as a 'foundation for the museum and archives trust' 'to provide and maintain a museum and art gallery'. The extant Alfred Gillett Trust (1904) was wound up, the family trustees in 1985 comprising Bancroft Clark, Peter Clothier, Nathan Clark and Mary Lovell.
A new form of the Trust was established in 2002, which forms the current charitable agreement under which the Alfred Gillett Trust now operates in order to preserve the heritage of the Clark family and C & J Clark Ltd along with the history of the footwear industry, domestic and social life in Street, the Religious Society of Friends in Street and the fossil collections. New Trust headquarters and storage were provided at the Grange, Street in 2012.

**Extent / Number of items or parts**
19 large fossils; 187 small fossils (see Scope and Content and Finding Aids).

**Archival history / Acquisition method, date and source**
Many of the reptile specimens were collected personally by Gillett and were given to the Geological Museum in 1887. The British Museum (Natural History), Henry Woodward, James Clark, John Gillett and Josiah Seymour also donated collections in 1887. In 1937 Street Club and Institute gave ownership to the Crispin Hall Trust. Collections were dispersed and swapped in the first half of the 20$^{th}$ century and although this is not wholly documented (see Admin History), it seems that the local specimens were retained and the non-local material was dispersed. The collection includes three specimens formerly housed in the entrance of Netherleigh, Street, and one from The Grange, Street.

**Field collection information**
It is assumed that the majority of specimens now in the collection were excavated locally although no detailed provenance or documentation has survived for most individual specimens. Geographical locations are specified for some non-local items (see Finding Aids).

**Scope and content / Object description**
A band of rocks, traditionally termed the Lias, stretches across England from Cleveland through Dorset and across the Channel to Europe. The Liassic rocks are mostly beds of limestone alternated with laminated shales and clays, deposited on the sea floor from about 200 million years ago onwards in the early part of the Jurassic

period. The Lias rocks at Street are at the lowermost and oldest beds of the formation, some possibly as old as the end of the preceding Triassic Period (although this is currently a matter of scientific debate). They have produced noteworthy reptilian remains of international significance, given their very early date, recording the recovery of life after the mass extinction that took place at the end of the Triassic Period. They therefore complement the more famous fossils from the Lias rocks at Lyme Regis in Dorset, which are of rather younger age. The earliest fossil collections from Street date to c 1820 and result from local quarrying activities within the vicinity.

This collection is significant as little or no rock is exposed today in the immediate Street area, let alone being turned over for extracting new specimens. Ichthyosaurs and plesiosaurs from Street and surrounding parts of Somerset are found in number of museums today, with notable collections at the Natural History Museum, London, the Universities of Oxford and Cambridge and the Royal Literary and Scientific Institution, Bath (now at National Museum of Wales). An important collection at Bristol City Museum was largely destroyed during the Second World War.

The surviving large marine reptile skeletons in the care of the Alfred Gillett Trust are formed from the local Lias and date from the late Triassic to the early Jurassic periods, c 205m-195m years ago. The large specimens comprise medium sized ichthyosaur skeletons, one plesiosaur skeleton missing its head and neck, and one plesiosaur head. Smaller slabs of partial skeletons and isolated and scattered bones and teeth from ichthyosaurs and plesiosaurs are extant, in addition to a selection of fish, plants, invertebrates, plus material from north Somerset (Radstock). The matrices vary in shale and limestone.

The following rough classifications have been made (lists available on request):
i) 19 large fossils listed by J B Delair in 1968 (12 mounted)
ii) 187 fossils (mainly small) listed by James Boswell (Clarks Archivist) / Dr M L K Curtis, Bristol Museum, in Apr-Jul 1980 as follows: Vertebrates 1-24 incl. ichthyosaurs 1-9b, fish 14-24; plants 25-34; rocks and minerals 35-43; ammonites 44-61; belemnites 62-76; brachiopods 68-80; echinoderms 81-85; gastropod 86; lamellibranchs 87-120; corals 121-142-149 recent shells
iii) Archaeological specimens, listed by David Dawson, Bristol Museum, May 1980, nos 150-165
iv) Fossils identified by Dr Curtis, 166-187
v) Box of unidentified specimens
vi) 19 large fossils listed by David Martill, Ryosuke Motani and Michael Taylor in 2009 conference handout as follows: *Leptonectes tenuirostris* (2), *Temnodontosaurus platyodon, Ichthyosaurus communis* (11), *Ichthyosaurus* sp. (3), *Thalassiodracon hawkinsi* (2)

**System of arrangement**
The order of Delair (1968) and Curtis (1980) is largely retained.

**Physical characteristics and technical requirements**
The collection has been examined professionally on a number of occasions during the 1940s-1960s (see Admin History) and was conserved in the 1960s and 1970s. The collection is in good overall condition, except large specimen 12. Small specimens 23,

33, 45, 48 and 59 require treatment for pyrite oxidation. The small specimens require repackaging/remounting.

The larger ichthyosaur fossils are mounted into wooden frames and are stored tilted at display height. The other fossils are typically not mounted.

**Access conditions**
Access is by prior appointment at the discretion of the Trust and on completion of the Trust's Geology Collection Research Request Form.

**Reproduction conditions**
Usual Alfred Gillett Trust conditions apply.

**Finding aids**
A variety of catalogues are available for different parts of the collection. The small specimens largely retain their original labels as provided by the donors in 1887 (British Museum, George Hinde and Henry Woodward), with some relabelled in the 1930s (presumably by Miss Gullick). The large fossils have no original labels (some were possibly lost during display at Crispin Hall), and these 19 specimens were listed by J B Delair in 1968 (ichthyosaurs nos 1-9b; plesiosaurs nos 10-13). Dr Curtis listed 187 fossils including the smaller specimens in 1980. Mike Taylor, David Martill and Ryosuke Motani summarised the large reptiles in 2009.

Further cataloguing work is needed on the collection to check that all specimens are present and to remedy the duplicate numbering system for parts of the collection. The collection is also in need of additional research and updating of names.

See also:
Delair, J.M. 1978. 'The Alfred Gillett collection of fossil saurians from the Street Lower Lias rocks. Also paintings of Street and vicinity'. Exhibition, The Bear Hotel, Street, Somerset, 24 July – 28 August 1978.
[Martill, David M, Ryosuke Motani and Michael A Taylor]. 2009. 'Alfred Gillett and fossils from Street' [listing of 19 large fossils for Geology Curators' Group conference, Street]
Taylor, M.A. 1984. 'Report on the geological collection of the Shoe Museum, C & J Clark Ltd, Street'. Yelverton: Area Museum Council for the South West

**List of figured and cited material in the collection**
Appleby, R M. 1979. 'The affinities of Liassic and later ichthyosaurs', *Palaeontology*, 22, 921-946
Benson, Roger, Mark Evans and Mike Taylor. [in press] 'The anatomy of Stratesaurus (Reptilia, Plesiosauria) from the lowermost Jurassic of Somerset, United Kingdom', *Journal of Vertebrate Palaeontology*
Benson, Roger, Mark Evans and Patrick Druckenmiller. 2012. 'High Diversity, Low Disparity and Small Body Size in Plesiosaurs (Reptilia, Sauropterygia) from the Triassic–Jurassic Boundary', *PLoS ONE*, 7(3), e31838, Mar 2012
McGowan, C. 1973. 'Differential growth in three ichthyosaurs: *Ichthyosaurus communis, I. breviceps and Stenopterygius quadriscissus (Reptilia, Ichthyosauria)*', *Life Sciences Contributions, Royal Ontario Museum*, 93, 1-21

McGowan, C. 1974a. 'A revision of the longipinnate ichthyosaurs of the Lower Jurassic of England with descriptions of two new species (Reptilia, Ichtyosauria)', *Life Sciences Contributions, Royal Ontario Museum*, 97, 1-37
McGowan, C. 1974b. 'A revision of the latipinnate ichthyosaurs of the Lower Jurassic of England (Reptilia, Ichthosaurs)', *Life Sciences Contributions, Royal Ontario Museum*, 100, 1-30
Storrs, G W and M A Taylor. 1996. 'Cranial anatomy of a new plesiosaur genus from the lowermost Lias (Rhaetian/Hettangian) of Street, Somerset, England', *Journal of Vertebrate Palaeontology*, 16, 403-420

**Related units of description**
Some specimens formerly held at the Crispin Hall Museum are now held at Bristol Museum and possibly other institutions (see Archival history).

Other significant collections of ichthyosaurs and plesiosaurs are held at the Natural History Museum, Oxford and Cambridge Universities and the National Museum of Wales (Moore Collection on loan from the BRLSI).

Correspondence relating to the history of the collection, the Alfred Gillett Trust and dispersal to other institutions are held by the Alfred Gillett Trust (in-house collection files and throughout various archive collections – JWGF, PHO, PHOTO, WN, CJC, JCB, MISC, BC, ACC2012/A73, ACC2012/A100, ACC2014/A25, LHB 24, LHB 25) and Bristol City Museum (Historical File 2964M and Geology File 128 and DYEI).

**Publication and exhibition note / References to published bibliographical information**
The collection was permanently held on display at the Crispin Hall between 1887 and 1948. Following the closure of the Geological Museum in 1948, only the large reptiles remained on display on the wall in the then Youth Club table tennis room. A temporary exhibition of the ichthyosaurs was held at the Bear Hotel, 24 Jul-28 Aug 1978 (exhibition leaflet text by J B Delair, 1978). Private views of the collection were held as part of two Geology Curator Group Study Days in spring 2009 and spring 2010 (see Martill handout, 2009).

The following articles have been published on the collection or on Street geology:

Benson, Roger, Mark Evans and Mike Taylor. [in press] 'The anatomy of Stratesaurus (Reptilia, Plesiosauria) from the lowermost Jurassic of Somerset, United Kingdom', *Journal of Vertebrate Palaeontology*
Benson, Roger, Mark Evans and Patrick Druckenmiller. 2012. 'High Diversity, Low Disparity and Small Body Size in Plesiosaurs (Reptilia, Sauropterygia) from the Triassic–Jurassic Boundary', *PLoS ONE*, 7(3), e31838, Mar 2012
Cleevely R J, and S D Chapman. 1992. 'The accumulation and dispersal of Gideon Mantell's fossil collections and their role in the history of British palaeontology', *Archives of Natural History*, 19
Evans, Mark. 2010. 'The roles played by museums, collections and collectors in the earl history of reptile palaeontology', *Geological Society, London, Special Publications*, 343
Howe, S R, T Sharpe and H S Torrens. 1981. *Ichthyosaurus: a history of fossil sea-dragons*. Cardiff: National Museum of Wales

Lydekker, R. 1891. 'Note on a nearly perfect skeleton of Ichthyosaur tenuirostris from the Lower Lias of Street, Somerset', *Geological Magazine*, 3 (8)
McGowan, C. 1978. 'Further evidence for the wide geographical distribution of ichthyosaur taxa', *Journal of Palaeontology,* 52 (5), Sep 1978
--- 1979. 'The hind limb musculature of the Brown Kiwi…', *Journal of Morphology,* 160 (1), Apr 1979
--- 1979. 'Selection pressure for high body temperatures: implications for sea dragons', *Palaeontology,* 5 (3), summer 1979
--- 1989. '*Leptopterygius tenuirostris* and other long-snouted ichthyosaurs from the English lower lias', *Palaeontology*, 32 (3)
Sherborn, C D. 1940. *Where is the – Collection? An account of the various natural history collections which have come under the notice of the compiler Charles Davies Sherborn D.Sc. Oxon. between 1880 and 1939*. Cambridge: Cambridge University Press
Storrs, Glenn W and Michael A. Taylor. 1996. 'Cranial anatomy of a new plesiosaur genus from the lowermost lias of Street, Somerset, England', *Journal of Vertebrate Palaeontology*, 16 (3): 403-420, Sep 1996
Taylor, Mike. 1981. 'Plesiosaurs – rigging and ballasting', *Nature*, 290, Apr 1981
--- 1985. 'The geological collections of Somerset County Museum, Taunton: their importance and future', *The Geological Curator*, 4 (6)
--- 1989. 'Thomas Hawkins FGS (1810-1889)', *The Geological Curator*, 5
--- 1997. 'Before the dinosaur: the historical significance of the fossil marine reptiles', in. J. M. Callaway and E. L. Nicholls (eds). *Ancient marine reptiles*. London: Academic Press
--- 2003. 'Joseph Clark III's reminiscences about the Somerset fossil reptile collector Thomas Hawkins (1810-1889): 'very near borderline between eccentricity and criminal insanity', *Proceedings of the Somerset Archaeological and Natural History Society*, 146
--- 2004. 'Thomas Hawkins (1810-1889)', *Oxford Dictionary of National Biography*

**Archivist's Note / Amendment History**
This description has been prepared by Charlotte Berry in compliance with ISAD(G) fonds level description (1995) and SPECTRUM 4.0 (2011), with particular reference to Taylor (1984). Dr Michael A Taylor has contributed significantly to this overview. Completed 10 Sep 2014, revised 25 Sep 2014, 1 Oct 2014 and 6 Oct 2014.