Peter Herring spent 18 months at sea with the International Indian Ocean Expedition 1961-62, as part of his Cambridge University PhD. As a result of this experience, he joined the UK, National Institute of Oceanography (which later became the Institute of Oceanographic Sciences, then IOS Deacon Laboratory, which became part of the Southampton Oceanography Centre University of Southampton in 1995, then became the National Oceanography Centre in Southampton) in 1966, at the beginning of his career as a marine biologist. He worked first on the pigments of deep-sea animals and specialised in the physiology and ecology of bioluminescence in the deep-sea environment, and its relation to vision. This remained his major research interest throughout his career but he also worked on the distribution and visual physiology of hydrothermal vent shrimp and the distribution of midwater animals in relation to the oxygen minimum in the NW Indian Ocean. He developed techniques for the better capture of live deep-sea animals and has been involved as participant of Chief Scientist in over 60 research cruises on ships of 5 different countries. He ranks his dives in the Johnson SeaLink among his most rewarding career experiences. Johnson SeaLink was the name of a deep-sea scientific research submersible built by Edwin Albert Link in 1971.

<table>
<thead>
<tr>
<th>Items</th>
<th>Box</th>
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<tbody>
<tr>
<td>Atolla (Jellyfish) - data folders 1-3 (Bioluminescence material in folder 2)</td>
<td>1</td>
</tr>
<tr>
<td>Atolla - Correspondence, research material, notes, reprints</td>
<td>2</td>
</tr>
<tr>
<td>Atolla - Analysis</td>
<td>2</td>
</tr>
<tr>
<td>Atolla – Periphylla data</td>
<td>2</td>
</tr>
<tr>
<td>RMT (Reversible Midwater Trawl) – Decapods and fish (RRS Charles Darwin, Cruise 104, 1998) Scheherezade Project.</td>
<td>2</td>
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<tr>
<td>Reprints on “Reflectors” in light in fish/ aquatic animals – bioluminescence</td>
<td>3</td>
</tr>
<tr>
<td>Hydrothermal vents – biological communities – research material</td>
<td>3</td>
</tr>
<tr>
<td>Transparencies on Decapoda, mysidacea – species composition/distribution Arabian Sea – Atlantic Ocean 18N. 11N. Research material in ring binder.</td>
<td>4</td>
</tr>
</tbody>
</table>
| Bioluminescence videotapes
  *Hakon Mosby Cruise 1995* --Periphylla periphylla (crown or helmet jellyfish)
  Tapes:  
  *Fuji/VHS/ Fujishige-6ON. 5 Cassettes, PAL*
  *Specs/ Tape/content*  
  1) 1-6  1A, 1/5, copy of tape 1, plus timetable, PAL  
  7-10 1B, 2/5, copy of tape 1, plus timetable, PAL | 5   |
Bioluminescence videotapes

**HAKON MOSBY Cruise 1995** — Periphylla periphylla (crown or helmet jellyfish) continued

**Tapes:**

**Fuji/VHS/ Fujishge-6ON. 5 Cassettes, PAL**

<table>
<thead>
<tr>
<th>Spec</th>
<th>Tape/content</th>
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<tr>
<td>2)</td>
<td>14-19 2A, 3/5, copy of tape 2, plus timetable, PAL</td>
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<tr>
<td>3)</td>
<td>20-25 2B, 4/5, copy of tape 2, plus timetable, PAL</td>
</tr>
<tr>
<td>4)</td>
<td>26-32 3, 5/5, copy of tapes 2 &amp; 3, plus timetable, PAL</td>
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**Tapes:**

TDK HS  Bioluminescence in Periphylla.

Tape 1/3, 2/3, 3/3

0-15 In situ, ROV recordings, June 1995


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Bioluminescence videotapes

**HAKON MOSBY Cruise 1996** — Periphylla bioluminescence

**Tapes:**

**Tape (Pal)**

1. Periphylla (PAL)
2. Periphylla (PAL)
3. Periphylla (copy and time base) (PAL)
4. Periphylla (PAL)
5. Periphylla (copy and timer) (PAL)
6. No title

- Periphylla microsources

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Bioluminescence videotapes


Atolla and Periphylla data (4 tapes)

2. Periphylla/ *Atolla* – Cape Hatteras, 1964. VHS No.1, NTS (VHS)
4. 1) Periphylla, 1991 (end 0895) Tape 4/ 1993 NTSC (VHS)
   2) 1990, Medusae, Meno 5 and Siph 5 (1895-3856)
   3) Various CEPHS
5. Copy of Tape 1/1993 NTSC VHS with time base added 19/1/95 – Meduae etc.
6. Johnson SeaLink, 1990 (PAL copy)
7. Edited Periphylla highlights for Review Group 17/6/96
<table>
<thead>
<tr>
<th>Title</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Bioluminescence videotapes</strong></td>
<td></td>
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</tbody>
</table>
| **Johnson SeaLink Mediterranean Cruise, 1991** | NTSC – Bioluminescence, Medusae, Ctenus, Heterot, MUS, ISIT, SIT (VHS)  
NTSC - Reproduction animals, MUS (VHS)  
NTSC - MLIS LAB, No.1 (VHS)  
NTSC - MLIS LAB Biology, No.2. Transects (VHS) |
| **Bioluminescence videotapes** | Periphylla bioluminescence. Demonstration video. (Lure F Jorden), P.J.Herring, Woods Hole Oceanographic Institution Meeting 1996. (PAL) (VHS)  
2nd tape Copy (PAL) (VHS) |
| **RRS Discovery, 195, Cruise, 1990, Highlights. Widder/Herring (VHS) NJSC** |  
RRS Discovery, 195, Cruise, 1990, Highlights. Widder/Herring (VHS) NJSC – 2nd tape copy |
| **UCSB (University of California, Santa Barbara) Experimental data (4 tapes)** | 1. Metridia-tethered (P.J.Herring), October 1988, (NTSC) (VHS)  
2. Ostracods (W.Jim Mobin), September, 1988 (NTSC) (VHS)  
Gaussair/ISIT (P.J.Herring), October 1988 (NTSC) (VHS)  
Oncaeia/Lucicit/Metindia, (Author/date not recorded on tape case)  
3. Oncaeia (P.J.Herring) (NTSC) (VHS)  
4. Metridia/Lucicutia/Heteror habdus (P.J.Herring) (NTSC) (VHS)  
1995 – Coelenterate Meeting, Video (NTSC) (VHS)  
Johnson SeaLink. Squid, Highlights (NTSC) (VHS)  
Flashing Angular Fish (Cryptopsaras (NTSC) (VHS)  
Coelenterate bioluminescence, Copy of ASZ video (E.Widder). (NTSC) (VHS)  
Harbor Branch Oceanographic Institution – Bioluminescence video “The Secret lights in the sea”.  
Harbor Branch Oceanographic Institution – Video – “Red light flashes” (P.J.Herring, E.Widder, and A.Cope) Deep sea biology  
Johnson SeaLink, 1990@half-speed (NTSC)  
Johnson SeaLink 2002. (NTSC) |
Bioluminescence Videotapes

**Johnson SeaLink – Cruise, Cape Hatteras, 1994** (7 tapes)
1) Justin Hilites and NOAA, Highlights (NTSC) (VHS No.1)
2) Atolla: biology/ Atolla et al Kreisel (NTSC) (VHS No.2)
3) Cape Hatteras, 1994 (NTSC) (VHS No.3)
4) Cape Hatteras, 1994 (NTSC) (VHS No.4)
5) Atolla periphylla (No data screen) (NTSC (VHS)
6) Copy of VHS No.1 and part of VHS No.2 (0-17-00 with timer added (NTSC) (VHS)
7) Copy of VHS, No.2 (1700-5475) and timer data

**Johnson SeaLink Cruise 1996**
- Atolla and melanostorias, 1996 E.Widder. (VHS) (7 tapes)

Johnson SeaLink Cruise Cape Hatteras, 1996
Tape 1) plus Tape 1, Time base (VHS) (PAL)
Tape 2) plus Tape 2, and time base (VHS) (PAL)
Tape 3) plus Tape 3, and time base (VHS) (PAL)

Bioluminescence Videotapes

**Johnson SeaLink Bahamas Cruise 1989**, plus highlights and tape listing.
Tapes:
- Bahamas’89, ISIT Laboratory video, No.1-7 Window dub (7 tapes)
- Johnson SeaLink-l Bahamas’89, Window dub (5 tapes) frame ¾”.
  - Tapes 1-6; 6-12; 12-17; 18-22; 23-24.
- Johnson Sealink, 1989, Dive highlights. PAL copy
- Johnson SeaLink, 1989, Medusa etc. Data, Tape, 1 February 1993 (NTSC) (VHS)
- Johnson SeaLink, 1989, Laboratory – Bioluminescence highlights, P.J.Herring. (NTSC) (VHS)
- Johnson SeaLink, 1989, Highlights, P.J.Herring (NTSC) (VHS)

**Tape listing**, by E.Widden with covering letter from E.Widden from Harbor Branch Oceanographic Institution Inc. dated 22 January 1990. – Submersible given, data, tape No./counter interval/ depth/ collected/ quality/ specimen no. and comments.
## Bioluminescence videotapes

**ISIT Lander data, ** *RRS Discovery, 1998 sequence**
- *RRS Discovery* Cruise, 236, August/September 1998, Porcupine Seabight and Porcupine Abyssal Plain. (8 tapes) (VHS)
  1) *ISIT Discovery* 236/98/7 (29/30 August 1998)
  2) *ISIT Discovery* 236/98/12 (31 August - 1 September 1998)
  3) *ISIT Discovery* 236/98/24 (3 September 1998)
  4) *ISIT Discovery* 236/98/32 (12 September 1998)
  5) *ISIT Discovery* 236/98/40 (14 September 1998)
  6) *ISIT Discovery* 236/98/43 (16 September 1998)
  7) *ISIT Discovery* 236/98/47 (17 September 1998)
  8) *ISIT Discovery* 236/98/51 (19 September 1998)

**ISIT Lander data, ** *RRS Discovery, 1999 sequence* 
- *RRS Discovery* Cruise, 243, October/November 1999, Cape Verdian Plateau.
  ISIT Deployment (11 tapes) (VHS)
  1) *ISIT Test Deployment* (No date on tape case, but date on tape October 1999)
  2) *ISIT Deployment 2* (1A), Station 13634 (No date on tape case, October 1999)
  3) *ISIT Deployment 3*, Station 13640 (28/29 October 1999)
  4) *ISIT Deployment 4*, Station 13642 (29 October 1999)
  5) *ISIT Deployment 5*, Station 13648 (2 November 1999)
  6) *ISIT Deployment 6*, (Bungie) Station 13653 (4 November 1999)
  7) *ISIT Deployment 7*, Station 13656 (5 November 1999)
  8) *ISIT Deployment 8*, Station 13658 (6 November 1999)
  9) *ISIT Deployment 9*, Station 13661 (7 November 1999)
 10) *ISIT Deployment 10*, Station 13674 (7 November 1999)
11) *ISIT Deployment 11*, Station 13678 (15 November 1999)

## Bioluminescence videotapes

**ISIT Lander data RRS Discovery cruises (Miscellaneous 7 tapes) (VHS)**
1) *Discovery* 243, Tape 1
2) *Discovery* 243, Tape 2
3) *Discovery* Test Station 2, ISIT test on wire (27 August 1998)
4) *Discovery* ISIT Lander – Bioluminescence – 2000 (NTSC)
5) *Discovery* ISIT Lander – Bioluminescence – 2000 (PAL Copy)
6) *Discovery 250*, ISIT Lander, Deployment 4, Station 13920, 25 September 2000
7) ISIT Lander data: ISIT video footage, OceanLab, Aberdeen University.

- Deep-sea videotapes.
- Tape – Oplophorus photophores, October 1994 (VHS) (PAL)
- Tape - Oplophorus photophores, October 1994 and systems (PAL)
### Deep-sea Videotapes

#### Mid-water cruises
- Tape – SONNE Cruise, RRS Discovery 142, 1999. (HS) (NB: 2 tapes originally deposited. Original tape borrowed 13/6/12 PJ Herring for conversion to DVD for Discovery 50 Celebrations July 2012, NOC)
- Tape – RRS Discovery Cruise 195. 05 Sep - 05 Oct 1990. Photobiology, physiology and distribution of oceanic animals in the tropical North Atlantic. MFL (copy) (VHS)
- VENT Cruise – Exploring the hydrothermal vents of the Mid Atlantic Ridge, (Russian ship) the *Akademik Mstislav Keldysh* with its twin *Mir* submersibles. Channel 4 TV Programme. 1995
- VENT Cruise - Exploring the hydrothermal vents of the Mid Atlantic Ridge, (Russian ship) the *Akademik Mstislav Keldysh* with its twin *Mir* submersibles. Tape video 16 February 1995, Dive. (Email list of programme, for one ½ of video footage from Magnus L Johnson 21 March 1995 to PJ Herring) (Footage mostly from Paul Tyler cam, put together by Jon Copley).
- VENT Cruise R/V Atalante cruise 1998, Rainbow vent hydrothermal vent field site (Mid-Atlantic Ridge). Klimpine and Jollivent Dive high. (Copy) (VHS) (PAL)
- Tape – Orange roughy (*Hoplostethus atlanticus*) (Chris Thomas, film producer) for the Ministry of Agriculture, New Zealand, Fisheries Board. BBC TV Natural History Film Unit, Bristol, No date
- Tape – Squid shots with list of Stations. No date

#### Deep-sea Videotapes
- Tape – CEPHSVAR/ with a letter from Michael Vecchione, NOAA, National Marine Fisheries Service, 29 March 1993, with list of items on footage to P.J.Herring.
- Tape - The vampire squid (*Vampyroteuthis infernalis*) - video footage shot during research dives by Monterey Bay Aquarium Research Institute’s ROV – selected film shots. For educational purposes only/ no research use of these images be made without written permission from MBARI
<table>
<thead>
<tr>
<th>Deep-sea Videotapes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tape – Glow worm <em>Neugeland – Fireflies Malaysia</em> 7’ various tests. LAT 1A Record Type Lecture, 20 July 1990</td>
</tr>
</tbody>
</table>

Bioluminescence and Deep-sea Videotapes (Commercial tapes)

- BBC Blue Planet – Highlights from RRS *Discovery* Cruise, 243, October/November 1999, Cape Verdian Plateau. (2 copies)
- BBC Blue Planet – Excerpts from Deep-sea Programmes, annotations by P.J.Herring on post-it sticker.

Bioluminescence and Deep-sea Videotapes (Commercial tapes)

- BBC The Abyss – interactive – BRD200946
- BBC The Abyss – live TX17.20
- BBC The Abyss – 29 October 2002, BBC2 (PAL)
- BBC The Abyss Live – nine north – inserts aspect 4.3 24 October 2003
- BBC Wildlife on One – *Nature’s Neons*, with notes P.J.Herring inserted in slipcase.
- BBC *Atlantic Realm* – promotion tape, duration 14-30 min, copy 20F4 (VHS), BBC internal purposes only Ser 321975
- BBC *Atlantic Realm* as HR23911 and HR23888 with T.CAD (VHS)
- BBC Bristol – *Cyclops* – demonstration tape, 1987 copy 2 of 4, From VPR, duration 24’58”. BBC Internal purposes only, Ser 321930.
- BBC Natural World, February 1995 *Ocean Drifters*.