**Species** | **Right Whale** | **Whale ID** | **Eg #2030**
---|---|---|---
**Date first observed entangled** | 10 May 1999 | (date seen prior without gear) | (11 Sep 1997)
**Sex** | Female | Birth year | Unknown
**Age at entanglement** | 9+

**Case study ID** | **PCCS** | **NMFS** | **GEAR ID**
---|---|---|---
**E4-99** | **J051099 a-b**
**Gear sample collected?** | Yes | **Gear type** | Sink gillnet

**Reproductive prior to/after entanglement detection?** | No/No
**Entanglement injury severity** | Severe
**Entanglement configuration risk** | High

**Wound severity**
- Mouth
- Head/Rostrum
- Flippers
- Body
- Flukes
- None
- None
- High
- High
- Medium

**Duration of time carrying gear** | Minimum 163 days, maximum 768 days
**Disentangled?** | No
**Status** | Dead - 20 Oct 1999
**Number of prior entanglement interactions** | 4

**Entanglement configuration**
- Whale free-swimming; chest and back wraps stretched between flippers, each with multiple wraps; very little trailing line.
- Anchoring point(s): Flippers, body
- Gear configuration confidence: High
- Remaining questions: None
- Comments: Multiple disentanglement attempts were unsuccessful; tail harness was tried but failed.

**Polymer type** | **PP** | **PP/PET**
---|---|---
**Gear component** | Gillnet anchor system | Gillnet anchor system
**Rope diameter (inches)** | 1/2 (0.469) | 9/16 (0.571)
**Breaking strength (lbs)** | Tested 2 757 | 5 440
| New 3 780 | 6 800

*This case study was developed under NOAA Award # NA09NMF4520413 to the Consortium for Wildlife Bycatch Reduction, administered at the New England Aquarium, Boston, MA, USA (available at www.bycatch.org). See: Knowlton, A.R., J. Robbins, S. Landry, H.A. McKenna, S.D. Kraus, T. B. Werner. 2015. Effects of fishing rope strength on the severity of large whale entanglements. Conservation Biology DOI: 10.1111/cobi.12590*
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DATA SHEET
FORENSIC ANALYSIS OF ROPES
WHALE ENTANGLEMENT PROJECT

SPECIMEN ID NO.  NMFS NO.
J051099       E4-99

Gear Description:
Note on gear indicated use with gill net operation. As seen in photo, the separate segment on the left has been unlaid and one end indicates a tensile break.

The gear consisted of a large length of the 3-strand polypropylene rope described below and a segment of 5/8 inch combo rope too short to analyze.

Gear set possibly associated with gill netting.

Rope description:
J051099-b: Short segment of 5/8 inch combo rope

<table>
<thead>
<tr>
<th>Tested (T) or adjusted (A) strength</th>
<th>Typical new strength</th>
<th>Rope condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,440 lbs (A)</td>
<td>6,800 lbs</td>
<td>Good</td>
</tr>
</tbody>
</table>

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Rope description:
J051099-a: 1/2 inch 3-Strand, yellow PP monofilament with one blue rope yarn in one strand.
There are 7 rope yarns per strand including marker. Little wear, some broken filaments along length. Some of the line was in better condition as seen in the lower photo.

<table>
<thead>
<tr>
<th>Tested (T) or adjusted (A) strength</th>
<th>Typical new strength</th>
<th>Rope condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,757 lbs (T)</td>
<td>3,780 lbs</td>
<td>Fair</td>
</tr>
</tbody>
</table>

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