**Supplemental Table 1:** Mass strandings of asteroids as reported by the popular press. Reports were found by performing a key word search of “mass stranding” and “starfish” in www.google.com.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Location** | **Species Affected** | **Putative Cause** | **Ref** |
| 7-Mar-18 | Huelva, Andalusia, Spain | *Astropecten sp.* | Storm | https://www.thelocal.es/20180307/thousands-of-starfish-wash-up-in-andalusia-after-beast-of-the-east |
| 3-Mar-18 | Ramsgate and Hunstanton Beach, United Kingdom | *Asterias forbesi, Marthasterias glacialis, Crossaster papposus* | Cold Weather | http://www.abc.net.au/news/2018-03-06/dead-starfish-freeze-wash-up-on-english-beaches-in-cold-weather/9519986 http://www.edp24.co.uk/news/environment/warning-issued-after-mysterious-objects-and-dead-starfish-found-on-hunstanton-beach-1-5420824 https://www.essexlive.news/news/shocking-pictures-show-essex-beach-1298188 |
| 22-Jan-18 | Falmouth, Cornwall, United Kingdom | *Marthasterias glacialis* | Cold temperatures, wind | http://www.falmouthpacket.co.uk/news/15888795.Hundreds\_of\_starfish\_washed\_up\_on\_Falmouth\_beach/ |
| 20-Jan-18 | Fripp Island, South Carolina, USA | *Astropecten sp.* | Cold temperature, tides and swells | https://www.usnews.com/news/best-states/south-carolina/articles/2018-01-21/more-than-1-000-starfish-wash-up-on-south-carolina-beaches |
| 2-Jan-18 | Portabello Beach and Skegness, Scotland, United Kingdom | *Asterias forbesi* | Storm, Tides and Swells | http://www.bbc.com/news/uk-scotland-edinburgh-east-fife-42597867 https://www.skegnessstandard.co.uk/news/environment/starfish-wash-up-in-their-thousands-in-skegness-1-8312778 |
| 28-Dec-17 | Budleigh, Devon, United Kingdom | *Asterias rubens* | Wind and Swells | http://www.newsweek.com/millions-starfish-found-after-strange-disease-killed-many-their-relatives-762290 |
| 3-Nov-17 | Starubskoye, Sakhalin Island, Russia | *Asterias amurensis* | Earthquake | http://www.pravdareport.com/news/science/earth/03-11-2017/139112-starfish-0/ |
| 24-Oct-17 | Cottesloe Beach, Perth, Australia | *Archaster angulatus* | Heavy swells | http://www.watoday.com.au/wa-news/dead-starfish-wash-up-on-perth-beach-20171025-gz7wxc.html |
| 11-Jun-17 | Sunrise Beach, Muizenberg, South Africa | *Marthasterias glacialis*  | Storms | https://www.timeslive.co.za/news/south-africa/2017-06-12-cape-storms-decimate-starfish/ |
| 2-May-17 | Rosemarkie Beach, Scotland, UK | *Asterias rubens* | Starballing | http://www.bbc.com/news/uk-scotland-highlands-islands-39777978 |
| 13-Apr-17 | Rosemarkie Beach, Black Isle, United Kingdom | *Asterias rubens* | Storms, Tides and Swells | http://www.bbc.com/news/av/uk-scotland-39594196/thousands-of-starfish-wash-up-on-rosemarkie-beach |
| 27-Feb-17 | Talacre, Wales, United Kingdom | *Asterias rubens* | Wind and swells | https://www.dailypost.co.uk/news/north-wales-news/hundreds-starfish-wash-up-talacre-12663286 |
| 30-Dec-16 | Callansoog, Netherlands | *Asterias rubens* | Strong Winds | https://www.dutchnews.nl/news/2016/12/thousands-of-starfish-strand-on-dutch-beach/ |
| 26-Dec-16 | Digby Beach, Nova Scotia, Canada | *Asterias forbesi* | Unknown | http://www.digbycourier.ca/community/starfish-crabs-mussels-and-lobster-washing-up-on-plympton-beaches-39885/ |
| 22-Nov-16 | Southsea, United Kingdom | *Asterias rubens* | Swells and Rough Weather | http://metro.co.uk/2016/11/22/thousands-of-starfish-wash-up-and-die-after-storm-angus-6275803/ |
| 18-Nov-16 | Standby, North Jutland, Denmark | *Astropecten sp.* | Wind and swells | http://cphpost.dk/news/thousands-of-starfish-wash-up-on-danish-beach.html |
| 3-Aug-16 | Fremantle, Western Australia | *Archaster typicus* | Wind, Swells | http://www.watoday.com.au/wa-news/up-to-1000-dead-starfish-wash-up-on-beaches-near-fremantle-20160803-gqjzno.html |
| 28-Jun-16 | Marmara Sea, Tekirdag, Turkey | *Unidentified Asteriidae* | Starballing | http://www.hurriyetdailynews.com/scores-of-starfish-wash-ashore-in-turkeys-northwest-101009 |
| 10-Mar-16 | Portsmouth, Southsea, United Kingdom | *Asterias forbesi* | Storm | https://www.portsmouth.co.uk/news/thousands-of-starfish-washed-up-on-southsea-beach-1-7266955 |
| 26-Jan-16 | Port St Joe, Florida, United Kingdom | *Luidia clathrata* | Storms | https://www.nbcnews.com/video/thousands-of-starfish-wash-ashore-in-florida-608798787830 |
| 26-Nov-15 | Moreton Island, Queensland, Australia | *Pentaceraster regulus* | Wind, swells | http://www.abc.net.au/news/2015-11-26/starfish-wash-up-on-moreton-island/6974896 |
| 8-Jun-15 | Cape Town, South Africa | *Marthasterias glacialis* | Storms, wind | https://www.iol.co.za/news/rescued-starfish-to-be-released-1868885 |
| 22-Apr-15 | Harrington, Cumbia, United Kingdom | *Asterias rubens* | Winds, Storms | http://www.bbc.com/news/uk-england-cumbria-32408846 |
| 8-Feb-15 | South Carolina, USA | *Astropecten sp.* | Winds, Tides | https://www.postandcourier.com/archives/starstruck-a-beach-littered-with-stranded-starfish-is-work-of/article\_4df7bf23-2b81-58bd-a95e-ce1b4f3c4d9d.html |
| 2-Feb-15 | Pensarn, Conwy, Wales, United Kingdom | *Asterias rubens* | Winds, Stranding | https://www.walesonline.co.uk/news/wales-news/were-thousands-starfish-washed-up-8559911 |
| 25-Dec-14 | Fripp Island, South Carolina, USA | *Astropecten sp.* | Cold temperatures | https://www.usnews.com/news/best-states/south-carolina/articles/2018-01-21/more-than-1-000-starfish-wash-up-on-south-carolina-beaches |
| 12-May-14 | Sunshine Bay, Auke Bay, Alaska USA | *Pycnopodia helianthoides* | Storms, Winds | http://juneauempire.com/local/2014-05-14/biologists-investigate-mysterious-sun-star-beach-stranding |
| 2-Apr-14 | Gulf Shores, Alabama, United States | *Luidia clathrata* | Strong currents, winds | http://miami.cbslocal.com/2014/04/02/thousands-of-dead-dying-starfish-washing-ashore-fla-bama-beaches/ |
| 3-Feb-14 | South Padre Island, Texas, United States | *Astropecten sp.* | Strong currents, Winds, Tides | https://www.chron.com/news/houston-texas/texas/article/Thousands-of-healthy-starfish-mysteriously-wash-5200685.php |
| 24-Jan-13 | Cleethorpes, Lincolnshire, United Kingdom | *Asterias rubens* | Storms | http://www.dailymail.co.uk/news/article-2267632/Thousands-dead-starfish-mysteriously-wash-Lincolnshire-beach-following-stormy-weather.html |
| 4-Jun-12 | Ishigaki, Japan | *Acanthaster planci* | Starvation, Winds | http://www.bbc.co.uk/nature/18294729 Suzuki et al. Coral Reefs https://link.springer.com/article/10.1007%2Fs00338-012-0906-z |
| 7-Apr-11 | Pawleys Island, South Carolina, USA | *Astropecten sp.* | Winds, Tides | http://www.live5news.com/story/14401080/thousands-of-starfish-wash-ashore-in-pawleys-island |
| 24-Mar-11 | Talybont, Wales, United Kingdom | *Asterias rubens* | Storms | http://www.bbc.com/news/uk-wales-north-west-wales-12845262 |
| 6-Jan-11 | Thanet Coast, United Kingsom | *Astropecten sp., Asterias rubens, Marthasterias glacialis, Crossaster papposus* | Storms, Wind | https://www.livescience.com/10412-mystery-thousands-dead-crabs-litter-england-beaches.html |
| 18-Mar-10 | Devon, United Kingdmo | *Asterias rubens* | Winds, Cold Weather | http://www.dailymail.co.uk/sciencetech/article-1259101/Thousands-dead-starfish-washed-Devon-beach.html |
| 8-Dec-09 | Holkham Beach, Norfolk, United Kingdom | *Asterias rubes* | Wind, Storms | http://www.dailymail.co.uk/news/article-1234177/Thousands-starfish-carpet-Norfolk-beach-storm-throws-sea.html |
| 19-Mar-08 | Kent, United Kingdom | *Astropecten sp., Crossaster papposus, Asterias rubens* | Winds, Tides, Cold Weather | http://www.dailymail.co.uk/news/article-540137/Starmageddon-As-thousands-starfish-wash-beaches-blame-destroying-natures-little-marvels.html |