MarLIN
Marine Information Network
Information on the species and habitats around the coasts and sea of the British Isles

Sea mouse (*Aphrodita aculeata*)

MarLIN – Marine Life Information Network
Biology and Sensitivity Key Information Review

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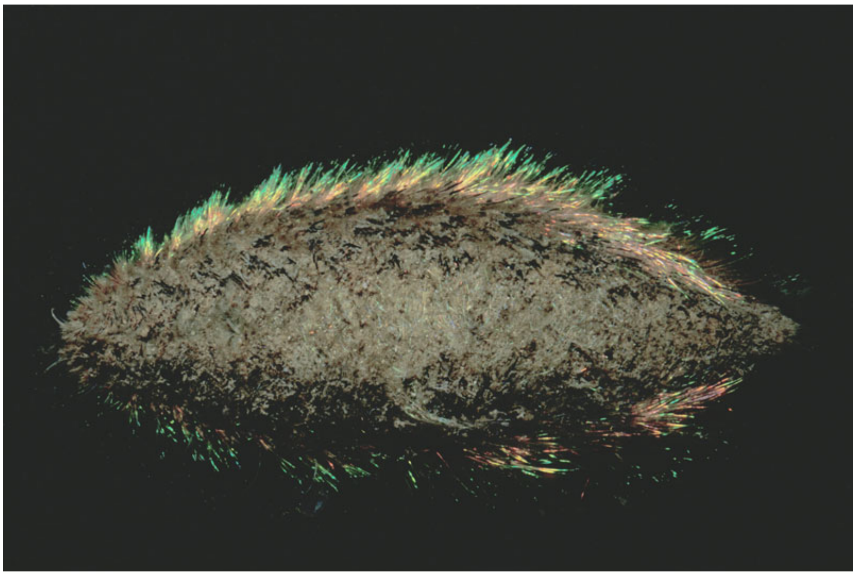

Aphrodita aculeata.
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See online review for distribution map

Distribution data supplied by the Ocean Biogeographic Information System (OBIS). To interrogate UK data visit the NBN Atlas.

Researched by	Dr Harvey Tyler-Walters & Joelene Hughes	**Refereed by**	This information is not refereed.
Authority	Linnaeus, 1758		
Other common names	-	**Synonyms**	*Aphrodite aculeta*

Summary

Description

An oval bodied worm of around 10-20 cm long with a width of up to 6 cm. This polychaete has a distinctive covering of chaeta and bristles giving it a mat-like, 'felt' appearance. Some chaetae are iridescent giving the flanks a blue, green, yellow and bronze shimmer. The ventral underside is yellow/brown in colour and forms a ridged, flattened sole. The head is hidden but two horn-like palps protrude in front.

Recorded distribution in Britain and Ireland

Found around the coasts of Britain and Ireland.

Global distribution

Reported from the North Atlantic including off Newfoundland and the North Sea, the Baltic, and the Mediterranean.

Habitat

Found in the sublittoral to depths of over 1000 m in muddy sand.

Depth range

Sub-littoral to over 1000 m

Identifying features

- A polychaete worm composed of around 40 segments covered with 15 pairs of elytra (scales).
- Dorsal surface is convex and completely covered in a dense mat of long, fine chaetae.
- A fringe is formed along the lateral lines by thick dark coloured bristles mixed with longer green, blue and gold iridescent cirri.
- The chaetae cover 15 pairs of smooth elytra.
- The long cirri project through from segments not bearing elytra.
- The ventral surface is a brownish yellow colour, flattened and heavily papillate.
- The concealed head has two pairs of sessile eyes either side of a single antenna.
- Two palps and two pairs of shorter tentacles protrude from the head.

Additional information

Aphrodita aculeata is named after the Greek goddess of love. All members of the family Aphroditidae are characterized by scales (the elytra) on their back (dorsal surface) which, in *Aphrodita aculeata*, are covered by a conspicuous layer of long, fine chaetae forming a mat of 'felt'. Detailed descriptions of this species are given by Fordham (1925), Chamber & Muir (1997) and Barnich & Fiege (2000). *Aphrodita aculeata* is distinguished from *Aphrodita alta* and *Aphrodita perarmata* by the presence of iridescent lateral chaetae in *Aphrodita aculeata* (Barnich & Fiege, 2000).

Individuals may be found washed up on shores after storms or stranded during low tides.

Listed by

Further information sources

Search on:

NBN WoRMS

Biology review

Taxonomy

Phylum	Annelida	Segmented worms e.g. ragworms, tubeworms, fanworms and spoon worms
Class	Polychaeta	Bristleworms, e.g. ragworms, scaleworms, paddleworms, fanworms, tubeworms and spoon worms
Order	Phyllodocida	
Family	Aphroditidae	
Genus	Aphrodita	
Authority	Linnaeus, 1758	
Recent Synonyms	Aphrodite aculeta	

Biology

Typical abundance	Low density
Male size range	10-20cm
Male size at maturity	
Female size range	Medium(11-20 cm)
Female size at maturity	
Growth form	Vermiform segmented
Growth rate	Data deficient
Body flexibility	High (greater than 45 degrees)
Mobility	
Characteristic feeding method	Active suspension feeder, Predator
Diet/food source	
Typically feeds on	Other polychaetes (see additional information below).
Sociability	
Environmental position	Infaunal
Dependency	Independent.
Supports	Substratum species of entoproct (see additional information).
Is the species harmful?	No

Biology information

Little information on the biology of this species was found. However, a detailed description of its anatomy is given by Fordham (1925).

Feeding

Mettam (1980) found that *Aphrodita aculeata* was an active predator feeding primarily on other worms, including both large active polychaetes and sedentary polychaetes. For example, the gut contents of *Aphrodita aculeata* were reported to contain the remains of *Pectinaria* and *Lumbriconereis*; polynoids, nereids, sabellids and terebellid polychaetes; nemerteans, and very young crabs and hermit crabs. In laboratory experiments, *Aphrodita aculeata* did not feed unless buried and only attacked prey overnight. In the laboratory it fed on *Nephtys hombergi*, *Hediste diversicolor* and *Nereis virens*. Prey was swallowed whole, head first, passing slowly into the intestine, and its remains being deposited in a faecal pellet in the same order, i.e. head first (Mettam, 1980). Swallowing large prey is a laboured process (Mettam, 1980), e.g. the king rag *Nereis virens*, is about three times the length of the sea mouse. The swallowing of *Nereis virens* by the sea mouse was likened "to a hedgehog swallowing a snake" (Gunnar Thorson pers comm. cited in Mettam, 1980).

Movement
Mettam (1971) suggested that the wide body shape of *Aphrodite aculeata* was an adaptation to the 'slow crawling' mechanism of locomotion found in other polychaetes. Forward propulsion is achieved by movement of individual parapodia in a 'fast stepping pattern' rather than the sinusoidal undulations characteristic of many other polychaete worms. For an illustration and detail of the musculature and mechanism involved see Mettam (1971).

Commensals
Aphroditoidea are known to harbour a variety of organisms under their scales and chaetae. *Aphrodita aculeata* was reported to host several entoprocts, e.g. *Loxosomella claviformis*, *Loxosomella fauveli* and *Loxosomella obesa* (Chambers & Muir, 1997).

Habitat preferences

Physiographic preferences	Open coast, Offshore seabed, Strait / sound, Sea loch / Sea lough, Enclosed coast / Embayment
Biological zone preferences	Lower circalittoral, Lower infralittoral, Upper circalittoral, Upper infralittoral
Substratum / habitat preferences	Coarse clean sand, Fine clean sand, Mixed, Mud, Muddy gravel, Muddy sand, Sandy mud
Tidal strength preferences	Moderately Strong 1 to 3 knots (0.5-1.5 m/sec.), Very Weak (negligible), Weak < 1 knot (<0.5 m/sec.)
Wave exposure preferences	Exposed, Extremely sheltered, Moderately exposed, Sheltered, Very sheltered
Salinity preferences	Full (30-40 psu)
Depth range	Sub-littoral to over 1000 m
Other preferences	No text entered
Migration Pattern	Non-migratory / resident

Habitat Information

Barnich & Fiege (2000) cite a record of *Aphrodita aculeata* from a depth of 3000 m in the Atlantic.

Life history

Adult characteristics

Reproductive type	
Reproductive frequency	No information
Fecundity (number of eggs)	No information

Generation time	Insufficient information
Age at maturity	Insufficient information
Season	See additional information
Life span	Insufficient information

Larval characteristics

Larval/propagule type	-
Larval/juvenile development	Lecithotrophic
Duration of larval stage	No information
Larval dispersal potential	No information
Larval settlement period	Insufficient information

Life history information

Little information on the reproduction and development of this species was found.
Gametogenesis
Aphrodita aculeata is dioecious, i.e. has separate sexes. In females, the ova (eggs), and in males the sperm, develop from the peritoneal sheath of the blood vessels (except the major dorsal and ventral vessels and branches close to the intestine) (Fordham, 1925). The ova and sperm are released into the body cavity (coelum) where the sperm complete their development. Mature females can be identified by 'cream coloured' eggs visible through the thin walls of the parapodia. In mature males the coelum is filled with a milky fluid, i.e. sperm (Fordham, 1925). No spermatophore was observed, although sperm may be arranged in groups of up to four (Fordham, 1925). Presumably large numbers of eggs and sperm are released although no estimate of fecundity was found.

Spawning
Sperm and ova are shed through the nephridia (the annelid excretory organs) and their nephridiopores on the dorsal surface (Fordham, 1925). Mature males and females were observed at Plymouth in October, when males were seen to spawn, although mature specimens were also collected in March (Fordham, 1925). Fordham (1925) also reported mature individuals in May and spawning in June (location unknown), and mature females in the Naples area in September. Individuals were observed spawning off Rame, Plymouth in November 1923 and mature females were collected in the Plymouth area in September 1930 (MBA, 1957). Thorson (1946) reports spawning in the Naples area in January and February, in aquaria in Naples in March, and mature females in the St Andrews area in May. Overall, Thorson (1946) suggested that spawning occurred in winter and spring.

Larval development
Larval development is probably but not necessarily similar to related species of Aphroditidae such as *Hermonia hystrix* and to a lesser degree to members of the Polynoidae such as *Harmothoe lunulata* (as *imbricata*). Larval development is lecithotrophic in the Aphroditidae so far studied i.e. *Hermonia hystrix* (Rouse & Pleijel, 2001). The larva is probably a ciliated, free-swimming trochophore, which develops into a juvenile composed of only a few segments on settlement. The larvae of *Hermonia hystrix* has a long pelagic phase (von Draschke, 1885 cited in Thorson, 1946). However, although *Aphrodite aculeata* were very common in the Øresund and, therefore, their larvae were expected to be common in the plankton, none were found in a four year period

(Thorson, 1946). Therefore, Thorson (1946) suggested that the larvae of *Aphrodite aculeata* either had a very short pelagic phase or non-pelagic development. However, no information on the larval development of this species was found.

Sensitivity review

This MarLIN sensitivity assessment has been superseded by the MarESA approach to sensitivity assessment. MarLIN assessments used an approach that has now been modified to reflect the most recent conservation imperatives and terminology and are due to be updated by 2016/17.

Physical Pressures

	Intolerance	Recoverability	Sensitivity	Confidence
Substratum Loss	High	High	Moderate	Low

Loss of its substratum would result in loss of the resident population and an intolerance of high has been recorded. Once the habitat has returned to suitable conditions, recovery may be high (see additional information below).

	Intolerance	Recoverability	Sensitivity	Confidence
Smothering	Low	Immediate	Not sensitive	Low

Aphrodita aculeata is an active burrowing species living in the surface sediment. Deposition of 5 cm of similar sediment is unlikely to adversely affect the species directly. Deposition of sediment that differs from that present is likely to modify the sediment structure, which may affect this species, depending on the nature of the change. However, at the benchmark level an intolerance of low has been recorded. Recovery is likely to be rapid.

	Intolerance	Recoverability	Sensitivity	Confidence
Increase in suspended sediment	Tolerant	Not relevant	Not sensitive	Not relevant

Aphrodita aculeata is an active predator and unlikely to be directly affected by changes in suspended sediment levels. It preys predominantly on other worms (Mettam, 1980) some of which are likely to be suspension feeders. Suspension feeders may benefit, or be adversely affected by changes in suspended sediment levels, depending on the species. However, *Aphrodita aculeata* can feed on a variety of prey and would probably not be adversely affected.

	Intolerance	Recoverability	Sensitivity	Confidence
Decrease in suspended sediment	Tolerant	Not relevant	Not sensitive	Not relevant

Aphrodita aculeata is an active predator and unlikely to be directly affected by changes in suspended sediment levels. It preys predominantly on other worms (Mettam, 1980) some of which are likely to be suspension feeders. Suspension feeders may benefit, or be adversely affected by changes in suspended sediment levels, depending on the species. However, *Aphrodita aculeata* can feed on a variety of prey and would probably not be adversely affected.

	Intolerance	Recoverability	Sensitivity	Confidence
Dessication	Not relevant	Not relevant	Not relevant	Not relevant

Stranded *Aphrodita aculeata* would undoubtedly die due to desiccation and predation. However, it is normally a subtidal species unlikely to be exposed to the air. Therefore, not relevant has been recorded.

	Intolerance	Recoverability	Sensitivity	Confidence
Increase in emergence regime	Low	Very high	Very Low	Low

An increase in emergence could potentially decrease the upper extent of the population. However, *Aphrodita aculeata* is a mobile species likely to migrate to deeper water. Therefore, an intolerance of low has been recorded.

	Intolerance	Recoverability	Sensitivity	Confidence
Decrease in emergence regime	Tolerant*	Not relevant	Not sensitive*	Not relevant

A decrease in emergence could potentially increase the habitat available to *Aphrodita aculeata*, assuming suitable substratum was present. Therefore, tolerant* has been recorded.

	Intolerance	Recoverability	Sensitivity	Confidence
Increase in water flow rate	Intermediate	High	Low	Low

Changes in water flow rate are unlikely to affect *Aphrodita aculeata* directly. However, water flow rate and other hydrodynamic factors have a significant effect on the distribution of sediments of different grain size in sedimentary habitats. Increased water flow deposits coarser sediments whereas reduced water flow rates will deposit finer sediments. *Aphrodita aculeata* has been recorded in habitats subject to very weak to moderately strong tidal streams (JNCC, 1999). An increase in water flow rate from for instance moderately strong to very strong (see benchmark) is likely to significantly alter the nature of the substratum. Therefore, an increase in water flow rate is likely to change the distribution and extent of *Aphrodita aculeata* populations and an intolerance of intermediate has been recorded. Once the habitat has returned to suitable conditions recovery is may be rapid (see additional information below).

Decrease in water flow rate	Not relevant	Not relevant	Not relevant	Not relevant

Changes in water flow rate are unlikely to affect *Aphrodita aculeata* directly. However, water flow rate and other hydrodynamic factors have a significant effect on the distribution of sediments of different grain size in sedimentary habitats. Increased water flow deposits coarser sediments whereas reduced water flow rates will deposit finer sediments. *Aphrodita aculeata* has been recorded in habitats subject to very weak to moderately strong tidal streams (JNCC, 1999). Therefore, a further decrease in water flow rate is unlikely.

Increase in temperature	Tolerant	Not relevant	Not sensitive	Very low

Aphrodita aculeata is a subtidal species and unlikely to be exposed to extreme temperature change due to natural events. It is also widespread, occurring off Newfoundland, in the North Sea, Baltic and the Mediterranean. Therefore, it is unlikely to be adversely affected by chronic temperature change at the benchmark level in British and Irish waters. Therefore, not sensitive has been recorded.

Decrease in temperature	Tolerant	Not relevant	Not sensitive	

Aphrodita aculeata is a subtidal species and unlikely to be exposed to extreme temperature change due to natural events. It is also widespread, occurring off Newfoundland, in the North Sea, Baltic and the Mediterranean. Therefore, it is unlikely to be adversely affected by chronic temperature change at the benchmark level in British and Irish waters. Therefore, not sensitive has been recorded.

Increase in turbidity	Tolerant	Not relevant	Not sensitive	Low

Light intensity is unlikely to affect *Aphrodita aculeata* directly.

Decrease in turbidity	Tolerant	Not relevant	Not sensitive	Low

Light intensity is unlikely to affect *Aphrodita aculeata* directly.

Increase in wave exposure	Intermediate	High	Low	Very low

Wave exposure and other hydrodynamic factors have a significant effect on the distribution of sediments of different grain size in sedimentary habitats, especially in shallow waters. *Aphrodita aculeata* has been recorded from extremely wave sheltered to wave exposed habitats (JNCC, 1999), although probably at greater depths in wave exposed locations. An increase in wave exposure from, for instance, exposed to extremely exposed, is likely to increase the erosion of fine sediments and favour coarse sediments and/or increase the mobility of the sediments. Mobile sediments are dynamic and harbour an impoverished fauna in comparison with stable sediments. Overall, an increase in wave exposure is likely to change the nature of the sediment, and reduce the extent of habitat suitable for *Aphrodita aculeata*. Therefore, an intolerance of intermediate has been recorded. Recoverability may be high (see additional information).

Decrease in wave exposure Tolerant Not relevant Not sensitive Low

Wave exposure and other hydrodynamic factors have a significant effect on the distribution of sediments of different grain size in sedimentary habitats, especially in shallow waters. *Aphrodita aculeata* has been recorded from extremely wave sheltered to wave exposed habitats (JNCC, 1999), although probably at greater depths in wave exposed locations. Therefore, a decrease in wave exposure from exposed to sheltered is unlikely to have an adverse effect.

Noise Tolerant Not relevant Not sensitive Not relevant

There is little information on the effects of underwater noise or vibration on invertebrates (Vella *et al.*, 2001). Although *Aphrodita aculeata* is likely to respond to the pressure wave or vibrations caused by potential predators, it is unlikely to be affected by noise at the benchmark level.

Visual Presence Tolerant Not relevant Not sensitive High

Mettam (1980) noted that, in the laboratory, *Aphrodita aculeata* only took prey overnight. This observation may suggest that it is either nocturnal or has a dislike of background lighting (as found in a laboratory). However, it probably has very poor visual acuity and is unlikely to be affected by shading or visual presence at the benchmark level.

Abrasion & physical disturbance Intermediate High Low Low

Large *Aphrodita aculeata* (>7 cm in length) were reported to suffer up to 31% mortality due to beam or otter trawls in sandy sediments of the North Sea (Bergman & van Santbrink, 2000). No mortality was reported in smaller individuals, presumably because they could pass through the trawls unharmed. Bergman & van Santbrink (2000) also reported an annual mortality for *Aphrodita aculeata* of up to 20% due to trawling in the Dutch sector of the North Sea in 1994. Kaiser *et al.* (1998) examined the immediate effects of beam trawling north east of Anglesey. They reported that, in stable sediments, the community significantly altered immediately after the trawl. The reduction in the abundance of *Aphrodita aculeata* and *Nephtys* spp. contributed significantly to the difference between trawled and control areas. However, no significant difference between trawled and control sites were detectable six months later, in part due to seasonal changes in the community during that period (Kaiser *et al.*, 1998). In another experiment, only 7-8% of *Aphrodita aculeata* caught in a beam trawl died while the majority were not damaged (Kaiser & Spencer, 1995). Storms are also known to cause physical disturbance in sedimentary habitats. For example, moderate numbers of *Aphrodita aculeata* were reported to be stranded after the 1975 to 1976 storms in Red Wharf Bay, Anglesey (Rees *et al.*, 1976).
Therefore, a proportion of the population is likely to be removed and/or displaced by physical disturbance and an intolerance of intermediate has been recorded. Recoverability is probably high (see additional information).

Displacement Low Immediate Not sensitive Low

Aphrodita aculeata is an active predator (Mettam, 1980) and probably capable of rapid burrowing. Therefore, if displaced to a suitable habitat, this species would probably burrow quickly to avoid predation. Therefore, an intolerance of low has been recorded. Recoverability is probably immediate.

Chemical Pressures

	Intolerance	Recoverability	Sensitivity	Confidence
Synthetic compound contamination		Not relevant		Not relevant

Residues of organochlorines have been detected in the tissues of *Aphrodita aculeata* in the northwest of the Dutch coast, an area in which incineration occurred before 1991 (Dethlefsen *et al.*, 1996). Residues of DDT and PCBs were detected however no information on their potential effects was noted. Little information on the effects of synthetic contaminants on *Aphrodita aculeata* was found. Bryan & Gibbs (1991) noted that polychaetes vary in their response, with some species exhibiting relative tolerance, while other species were moderately sensitive. However, in the absence of any further information, no assessment has been attempted.

Heavy metal contamination		Not relevant		Not relevant

Bryan (1984) suggested that polychaetes are fairly resistant to heavy metals, based on the species studied. Short term toxicity in polychaetes was highest to Hg, Cu and Ag, declined with Al, Cr, Zn and Pb whereas Cd, Ni, Co and Se the least toxic. However, no information concerning *Aphrodita aculeata* was found and no assessment has been made.

Hydrocarbon contamination		Not relevant		Not relevant

Suchanek (1993) reviewed the effects of oil spills on marine invertebrates and concluded that, in general, on soft sediment habitats, infaunal polychaetes, bivalves and amphipods were particularly affected. *Aphrodita aculeata* inhabits sublittoral sediments which are unlikely to be affected by oil spills directly, although hydrocarbons adsorbed onto particulates may be deposited. However, no information concerning the effects of hydrocarbon contamination on *Aphrodita aculeata* was found and no assessment has been made.

Radionuclide contamination		Not relevant		Not relevant

No information found

Changes in nutrient levels		Not relevant		Not relevant

Increasing nutrient levels may result in a change from the typical sediment community, to a community dominated by opportunist species (e.g. capitellids) with increased abundance but reduced species richness and in extreme situations to anoxic abiotic sediments (Pearson & Rosenberg, 1978). However, *Aphrodita aculeata* is a predator and unlikely to be directly affected, although it may suffer as a result of reduced oxygen levels in the sediment surface (see oxygenation below). However, no information concerning the effect of nutrient enrichment on *Aphrodita* was found and no assessment has been made.

Increase in salinity	High	High	Moderate	Very low

Kinne (1971b) suggested that marine polychaetes had limited capacity for osmoregulation and noted that the ionic concentration of the coelomic fluid in *Aphrodite aculeata* was very similar to that of ambient seawater. This evidence, although limited, suggests that it would be sensitive to an increase in salinity from full salinity, especially short term acute change. Therefore, an intolerance of high has been recorded, albeit at very low confidence.

Decrease in salinity	High	High	Moderate	

Aphrodita aculeata has been recorded only from habitats with full salinity (JNCC, 1999). Kinne (1971b) suggested that marine polychaetes had limited capacity for osmoregulation and noted that the ionic concentration of the coelomic fluid in *Aphrodite aculeata* was very similar to that of ambient seawater. This evidence, although limited, suggests that it would be sensitive to a decrease in salinity, especially short term acute change. Therefore, an intolerance of high has been recorded, albeit at very low confidence.

	Intolerance	Recoverability	Sensitivity	Confidence
Changes in oxygenation		Not relevant		Not relevant

Aphrodita aculeata is a shallow burrower living in the surface sediment layer, which may be expected to be well oxygenated. However, no information on its tolerance of hypoxic conditions was found and no assessment has been made.

Biological Pressures

	Intolerance	Recoverability	Sensitivity	Confidence
Introduction of microbial pathogens/parasites		Not relevant		Not relevant

While the spines and scales are known to harbour several species of entoproct (see general biology), they are thought to be commensal rather than parasitic. No information concerning diseases in *Aphrodita* was found.

	Intolerance	Recoverability	Sensitivity	Confidence
Introduction of non-native species		Not relevant		Not relevant

No information on competing or potentially competing non-native species was found.

	Intolerance	Recoverability	Sensitivity	Confidence
Extraction of this species	Not relevant	Not relevant	Not relevant	Not relevant

Aphrodita aculeata is unlikely to be the subject of targeted fisheries. However, it can be adversely affected by fishing activities for other species (see below)

	Intolerance	Recoverability	Sensitivity	Confidence
Extraction of other species	Intermediate	High	Low	Moderate

Large *Aphrodita aculeata* (> 7 cm in length) were reported to suffer up to 31% mortality due to beam or otter trawls in sandy sediments of the North Sea (Bergman & van Santbrink, 2000). No mortality was reported in smaller individuals, presumably because they could pass through the trawls unharmed. Bergman & van Santbrink (2000) also reported an annual mortality for *Aphrodita aculeata* of up to 20% in the Dutch sector of the North Sea in 1994. Kaiser *et al.* (1998) examined the immediate effects of beam trawling north east of Anglesey. They reported that, in stable sediments, the community significantly altered immediately after the trawl. The reduction in the abundance of *Aphrodita aculeata* and *Nephtys* spp. contributed significantly to the difference between trawled and control areas. However, no significant difference between trawled and control sites were detectable six months later, in part due to seasonal changes during that period (Kaiser *et al.*, 1998). In another experiment, only 7-8% of *Aphrodita aculeata* caught in a beam trawl died while the majority were not damaged (Kaiser & Spencer, 1995). Veale *et al.* (2000) examined epifaunal assemblages in the North Irish Sea in areas subject to different intensities of scallop dredging. Areas subject to high fishing effort were correlated with decreased species richness and diversity. In addition, *Aphrodita aculeata* was not found in areas subject to high fishing effort but present in relatively high abundance in areas subject to medium or low fishing effort (Veale *et al.*, 2000; Figure 3).
Therefore, a proportion of the population is likely to be removed and/or displaced by fishing or shellfishing activities and suggests an intolerance of intermediate. Based on the single event, experimental evidence above, recoverability is likely to be high. However, the evidence present by Veale *et al.* (2000) suggests that *Aphrodita aculeata* would be highly intolerant of, or not recover from, continuous or prolonged frequent trawling activity.

Additional information

Recoverability

No information on larval development, recruitment or population dynamics in this species was found. Thorson's observations (Thorson, 1946) suggest that larvae either have a very short pelagic phase or no pelagic phase, perhaps developing on the sea bed. In *Polynoe*, eggs are incubated under the elytra, however, brooding has not been observed in *Aphrodita* (Fordham, 1925). Therefore, dispersal potential by larval transport is probably low. However, the adults are probably highly mobile, are common and widespread. Recruitment probably occurs by adult recolonization and subsequent good local recruitment from short-lived or benthic larvae. Therefore, recoverability may be high, although no evidence was found.

Importance review

Policy/legislation

- no data -

Status

National (GB) importance	-	**Global red list (IUCN) category**	-

Non-native

Native	-		
Origin	-	**Date Arrived**	-

Importance information

The iridescent lateral spines of *Aphrodita* have been shown to function as photonic crystals that strongly reflect different wavelengths of light depending on its angle of incidence (Parker *et al.*, 2001). The study of its spines may provide clues to the design of photonic crystal fibres for use in communication (see Parker *et al.*, 2001).

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