Killer Shrimp

Advice for anglers and boat users

We need your help

Please help us stop the spread of invasive Killer Shrimp from Cardiff Bay.

Dikerogammarus villosus, commonly known as Killer Shrimp, has been found in Cardiff Bay (and the lower Taff and Ely), as well as at Eglwys Nunydd (Port Talbot), Grafham Water (Cambridgeshire) and Barton Broad (Norfolk Broads). This non-native species poses a serious threat to the aquatic wildlife found in our rivers, streams and lakes. There is no risk to public health or pets.

Cardiff Bay is a fantastic place to enjoy a wide range of water activities such as boating and fishing, attracting people from all over the country. This means that there is an increased risk of the shrimp being spread into new waters around the country where it is not currently found.

Killer Shrimp: scientific name *Dikerogammarus villosus*

Once the shrimp has invaded a waterbody, such as a lake or a river, there is no way for us to remove it. We therefore need your help to prevent it spreading further.

Stop the spread

Any activity that takes place in the water is at risk of spreading Killer Shrimp. By following the simple advice in this leaflet, water users can really make a big difference and help us to prevent the spread of this shrimp.

Always follow the ‘Golden Rules’ to reduce the risk of spreading Killer Shrimp.

Before leaving site:

CHECK your equipment and clothing for living organisms. Pay particular attention to areas that are damp or hard to inspect.

CLEAN all equipment, footwear and clothes thoroughly. If you do come across any organisms, leave them at the site where you found them.

DRY all equipment and clothing – Killer Shrimp will not survive in dry conditions for more than 48 hours. Make sure you don’t transfer water elsewhere.

Advice for anglers

- If you are going fishing, familiarise yourself with what the shrimp look like and how to prevent their spread.
- All nets, unhooking mats, feeders, buckets, towels and clothing are suitable surfaces for shrimp to cling onto, especially if used in the margins of the watercourse. Killer Shrimp can

survive for long periods on damp fishing equipment. Moving wet equipment into new waters could lead to the spread of the shrimp.
- When you have finished fishing, you must check all equipment for shrimp. Particular attention should be paid to folds in waders and the tread. Do not leave equipment in the water if you are not using it.
- To reduce the risk of moving shrimp, please avoid using keep nets unless really necessary, for example, when competing in fishing matches.

Follow the Check, Clean, Dry policy for all equipment that has entered the water, especially if you plan to fish a different river system or stillwater fishery.

Advice for boat users

- If you are going out on a boat, familiarise yourself with what the shrimp looks like and how to prevent spreading it.
- Regularly check attached mooring ropes and mudweights for shrimp.
- Any water that collects in bilges or inside kayaks and canoes must be completely emptied before leaving the site.
- If equipment is washed down, please make sure that the water does not drain directly into another watercourse.
- Wetsuits and boots should be hung up to dry. Equipment should be dried for 48 hours, ideally in sunlight, before it is used elsewhere.
- Particular attention must be paid to areas that retain water, remain damp or are hard to inspect.
- Reduce the contact time in which equipment is exposed to the water. For example, when not in use, or stationary for a period of time, outboard motors should be raised completely out of water.

Follow Check, Clean, Dry guidelines, especially if you are removing your boat from the water and taking it to a new site. Any attached algae, weed, mussels or other material could be hiding shrimps and must be thoroughly removed from all hulls and other submerged surfaces.

- Before removing your boat from the water, the engine should run for 5 minutes at above three quarters throttle to help clear any shrimp from within the exhaust system.

Raised outboard motor

- Store the boat and engine where they will not drain into a water body. The engine should be returned to its vertical (down) position to drain.
- Check the propeller bag regularly for shrimp. Clean and dry as required.
- If the propeller bag is not left on the engine, turn the bag inside out, check for shrimp and dry for 48 hours.

If Killer Shrimp are found (dead or alive)

If you believe you have found Killer Shrimp at a site not mentioned in this leaflet, please email a high quality photograph to the Non Native Species Secretariat at alert_nonnative@ceh.ac.uk. Let them know how many shrimp you found and where.

Wrap the shrimps in plastic and put them in a refuse bin. Do not pour them down a drain or put them back into the water.

Further information

Non Native Species Secretariat
www.nonnativespecies.org/alerts/killershrimp

Contact the Environment Agency
enquiries@environment-agency.gov.uk
03708 506 506 (Mon-Fri, 8am - 6pm)

Contact the Cardiff Harbour Authority
www.cardiffharbour.com

Contact the Countryside Council for Wales
www.ccw.gov.uk
By following the advice provided, you will be helping reduce the spread and impact of this invasive species. Thank you for your support.

Y Berdysen Reibus

Cyngor Cefn Gwlad Cymru
Countryside Council for Wales

CARDIFF
CAERDYDD
HARBOUR AUTHORITY
AWDURDOD HARBWR

Asiantaeth yr Amgylchedd Cymru
Environment Agency Wales

Cyngor i enweirwyr a defnyddwyr cychod

Mae arnom angen eich cymorth

Helpwch ni i atal ymlediad y Berdysen Reibus ymledol o Fae Caerdydd.

Canfuwyd *Dikerogammarus villosus*, sef y Berdysen Reibus, ym Mae Caerdydd (ac yn rhannau isaf Taf ac Elái), ac yn Eglwys Nunydd (Port Talbot), Grafham Water (Swyddog Amgylchedd Gaergrawnt) a Barton Broad (y Norfolk Broads). Mae'r rhywogaeth estron hon yn fygythiad difrifol i fywyd gwyllt ein hafonydd, ein nentydd a'n llynnoedd ni. Nid yw'n bygwth iechyd y cyhoedd nac anifeiliaid anwes.

Mae Bae Caerdydd yn lle gwych i fwynhau amryw weithgareddau dyfrol, megis hwylio a physgota, gan ddenu pobl o'r wlad i gyd. Golyga hynny fod mwy o berygl lledu'r berdysen i ddyfroedd newydd ledled y wlad lle ni cheir mohoni ar hyn o bryd.

Y Berdysen Reibus: enw gwyddonol *Dikerogammarus villosus*

Ond iddi gyrraedd dyfroedd fel llynnoedd neu afonydd, fedrwn ni ddim mo'i dileu oddi yno. Felly mae arnom angen eich cymorth i'w hatal rhag ymledu ymhellach.

Atal yr ymlediad

Gallai unrhyw weithgaredd dyfol ledu'r Berdysen Reibus. Trwydded amgylcheddol ganlyn cyngor syml y daflen hon, gall rhai sy'n defnyddio dyfroedd wneud gwahaniaeth mawr, a'n helpu i atal ymlediad y berdysen hon.

Canlynwch y 'Rheolau Euraidd' yn wastad, er mwyn lleihau perygl lledu'r Berdysen Reibus.

Cyn gadael safle:

CHWILIWCH eich offer a'ch dillad am greaduriaid byw, yn enwedig mannau gwlyb neu anodd craffu arnynt.

GLANHEWCH bob offer, esgidiau neu ddillad yn drwyadl. Os canfyddwch unrhyw beth byw, gadewch ef lle cawsoch hyd iddo.

SYCHWCH bob offer a dillad: all y Berdysen Reibus ddim byw rhagor na 48 awr heb ddŵr. Peidiwch â throsglwyddo dŵr o'r naill fan i'r llall.

Cyngor ar gyfer genweirwyr

- Os ewch i bysgota, dysgwch adnabod y berdysen, a sut mae atal ei hymlediad.
- Gall perdys fachu ar rwydi, matiau dadfachu, offer bwydo, bwcedi, llieiniau a dillad, yn enwedig o'u defnyddio ar ymylon dyfroedd. Gallant fyw gryn amser ar offer pysgota gwlyb. Gallai mynd ag offer gwlyb i ddyfroedd newydd ledu'r berdysen.
- O ddarfod pysgota, rhaid i chi chwilio'r holl offer am y berdysen, yn enwedig ym mhlygion ac yng

ngwadnau esgidiau bysgota. Peidiwch â gadael offer yn y dŵr onid ydych chi'n eu defnyddio.
- Er mwyn lleihau perygl symud perdys, ceisiwch osgoi defnyddio rhwydi cadw oni bai bod gwir angen (wrth gystadlu mewn gornestau pysgota, e.e.).

Canlynwch y polisi Edych, Glanhau, Sychu ar gyfer pob offer a fu yn y dŵr, yn enwedig os bwriadwch bysgota afon neu bysgodfa dŵr llonnydd arall.

Cyngor ar gyfer defnyddwyr cychod

- Os ydych chi'n mynd allan ar gwch, dysgwch sut olwg sydd ar y berdysen a sut mae atal ei lledu.
- Edrychwch yn aml ar raffau clymu a phwysau mwd, rhag bod perdys arnynt.
- Rhaid llwyr wagio unrhyw ddŵr sy'n hel yng ngwaelodion cychod neu'r tu mewn i gaiacau a chanŵau cyn gadael y safle.
- O olchi'r offer, sicrhewch nad yw'r dŵr hwnnw'n mynd yn syth i ddyfrffos arall.
- Dylid crogi siwtiau gwlyb ac esgidiau er mwyn eu sychu. Dylid sychu offer am 48 awr, yng ngolau'r haul os oes modd, cyn eu defnyddio yn unlle arall.
- Rhowch sylw neilltuol i fannau sy'n dal dŵr, yn aros yn wlyb neu'n anodd craffu arnynt.
- Lleihewch faint o amser y mae offer mewn cysylltiad â'r dŵr. Onid yw motor cwch yn cael ei ddefnyddio, er enghraifft, neu os yw'r cwch yn llonnydd am beth amser, dylid ei godi'n llwyr o'r dŵr.

Dilynwch y canllawiau Edrych, Glanhau, Sychu, yn enwedig wrth fynd â'ch cwch o'r dŵr ac i safle newydd. Gallai unrhyw algâu, chwyn, cregyn gleision neu ddeunydd arall guddio perdys, a rhaid eu glanhau'n drwyadl o gorff pob cwch ac unrhyw wynebau eraill fu o dan y dŵr.

- Cyn mynd â'ch cwch o'r dŵr, gadewch i'r injan redeg ar dri chwarter throtl am 5 munud, i helpu cael gwared ar unrhyw berdys yn yr egsôst.
- Cadwch y cwch a'r injan lle na fyddant yn draenio i ddŵr. Dylid troi'r injan i lawr er mwyn iddo ddraenio.
- Chwiliwch fag y sgriw yrru'n aml, rhag bod perdys ynddo. Cofiwch ei lanhau a'i sychu yn ôl yr angen.

Codi'r motor o'r dŵr

- Oni adewir y bag sgriw ar yr injan, trowch y bag tu chwyneb allan, chwiliwch am berdys ynddo, a gadewch ef i sychu am 48 awr.

O gael hyd i Berdys Rheibus (byw neu farw)

Os credwch i chi gael hyd i berdys rheibus yn rhywle ar wahân i'r lleoedd sydd wedi eu cynnwys yma, gyrrwch lun, o safon dam at yr Ysgrifenyddiaeth Rhywogaethau Estron yn alert_nonnative@ceh.ac.uk. Rhowch wybod iddynt sawl un a ganfuoch, ac ymhle.

Lapiwch y berdys mewn plastig a rhowch nhw mewn bin sbwriel. Peidiwch â'u golchi nhw i lawr y draen na'u dychwelyd nhw i'r dŵr.

Rhagor o wybodaeth

Yr Ysgrifenyddiaeth Rhywogaethau Estron
www.nonnativespecies.org/alerts/killershrimp

Cysylltwch ag Asiantaeth yr Amgylchedd
enquiries@environment-agency.gov.uk
03708 506 506 (Llun-Gwener, 8yb - 6yh)

Cysylltwch ag Awdurdod Harbwr Caerdydd
www.cardiffharbour.com

Cysylltwch ag Cyngor Cefn Gwlad Cymru
www.ccw.gov.uk

Trwy ganlyn y cyngor hwn, byddwch yn helpu lleihau ymlediad ac effaith y rhywogaeth ymledol hon. Diolch i chi am eich cymorth.