



**A REVIEW OF THE STATUS OF
WETLAND BIRDS
in the
MILFORD HAVEN WATERWAY
and
DAUGLEDDAU ESTUARY**

2022

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**Report to the Milford Haven Waterway Environmental Surveillance
Group**

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A note about the data

The data used in this report were collected by volunteers as part of the British Trust for Ornithology's Wetlands Bird Survey (WeBS). The data are summarised in this report to provide an overview of the status of wetland birds in the Milford Haven Waterway and Daugleddau Estuary. The data are not owned by the MHWESG. Anyone (including members of the MHWESG) wishing to refer to the data for official regulatory purposes e.g. Environmental Impact Assessment, public inquiries etc.) needs to submit a data request for official WeBS data - please visit www.bto.org/webs-data.

For context, this report contains additional Wetland Bird Survey (WeBS) data from Waterbirds in the UK 2019/20 © copyright and database right 2021. WeBS is a partnership jointly funded by the BTO, RSPB and JNCC, in association with WWT, with fieldwork conducted by volunteers.'

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EXECUTIVE SUMMARY

The Milford Haven Waterway - Daugleddau Estuary system (“the estuary system”) is an important wintering ground for waders and wildfowl because of its sheltered location and open mudflats.

The estuary system is of international importance by virtue of hosting an average of over 20,000 waterbirds of around 60 species each winter. It is of (UK) national importance for its populations of wintering pale-bellied Brent geese, wigeon, dunlin and greenshank. It ranks in the top five sites in Wales for shelduck, teal, golden plover, lapwing, snipe, black-tailed godwit, curlew, redshank, grey heron, little egret, and little grebe.

The estuary system holds some 14.5% of the Welsh waterbirds (on WeBS sites) in mid-winter, and just under 1% of the UK waterbirds counted on WeBS sites.

- **Light-bellied Brent Geese** breeding in the Canadian Arctic include the estuary system in their wintering/migration sites. Nationally important numbers are regularly found commuting between the Gann and Angle Bay.
- Almost all the **shelduck** in Pembrokeshire in winter are found on the estuary system. Numbers of wintering shelduck have fallen, both here and across the UK. Breeding success fell to an all-time low in 2012, but has recovered slightly.
- **Wigeon** numbers have increased dramatically since 2003, particularly on Pembroke River and Angle Bay. They move on, either to other parts of the estuary system or out of the estuary system altogether, as soon as one of their main food resources (*Zostera*) is exhausted in mid-winter.
- **Teal** numbers have fluctuated over the past decade, thought to be caused by the recent run of mild winters and an increase in the number of protected areas on mainland Europe allowing larger numbers of birds to remain further north and east.
- Mid-winter peak counts of **Curlew** have decreased on the estuary system, and in both the UK (33% decline in 25 years) and Europe in general. However, data indicate that the estuary system is still an important migratory stop-over for curlew.
- **Greenshank** numbers have increased following a period of low counts in the 1990s. The estuary system is one of the top fifteen wintering sites for this species in the UK, and almost half of the birds wintering in Wales are found here.
- The **Canada goose** population rose considerably in the 1990s, in line with the trends for the Welsh and the UK populations. Birds are most often found between Llangwm and Boulston, although they also feed away from the estuary. There is no clear evidence yet that they are affecting the numbers or distribution of other bird species, however, they may have an effect on the flora through trampling and eutrophication.
- **Greylag geese** were rarely recorded on the estuary system before 2005, but have since increased to over 100 (max 140 in 2018-19). There is increasing evidence of them breeding locally, and they may or may not be a future cause for concern.
- **Grey herons** breed at three main sites on the Cleddau estuary system, totalling around 15 nests each year in the 1990s. Numbers of nests appear to have declined, however, counts are sporadic and no conclusions can be drawn about the breeding population.
- Although **little grebes** no longer reach numbers of National Importance on the estuary system, 14% of the Welsh wintering population (on WeBS sites) are found here, and it is the fifth-most important site in Wales for them.

Most of the changes in bird populations on the estuary system are reflected at other sites, either in Wales or in the UK as a whole. For example, some of the observed changes in numbers using the estuary system in winter may reflect the run of mild winters between 1995 and 2009 (which may or may not suggest long-term climate change), so birds do not have to travel so far south and/or west to escape harsh winter weather. Data suggest that large numbers of birds are more likely to visit the estuary system during periods of extreme weather, but during normal weather would prefer the conditions (including a better food supply) on the east coast.

Winter distribution may also be affected by the increase in protected areas on the European mainland, which have resulted in birds, eg teal, that are susceptible to hunting pressure, to remain in those areas.

Counts done at low tide in 1997-98, 2005-06 and 2013-14 show the main feeding areas for most species to be Pembroke River, Angle Bay, Fowborough Point, Carew River and Gann Estuary.

Incidental data collected during annual breeding shelduck surveys in June/July and early August since 1992 have demonstrated the importance of the estuary system as a migration stop-over for several additional species, notably curlew.

The Cleddau estuary system continues to be of international importance for wintering and migrating wetland birds, and it is vital that the full range of their requirements (eg undisturbed good quality feeding habitat and high tide roosts) continue to be met here.

Why do we need to keep counting?

Annual monitoring will pick up trends in the numbers of birds at local and national levels, and will flag up changes that may require further consideration or investigation (eg water quality and recreational use) in the estuary system.

For example, in winter 2012-13 the wigeon arrived in September as usual, but left early, with the peak count some 3000 less than in previous winters. The peak count was 1200 lower still in 2013-14 but recovered in the two subsequent winters. Since 2018-19, a greater proportion have been using Angle Bay. These may be one-off or short-term events; they may have been caused by events away from the estuary; there may have been some disturbance that kept the birds away, or it may indicate some (temporary) change in the food supply in Pembroke River and Angle Bay.

Redshank numbers dropped by half in the early 1990s but have been reasonably stable since then. This is part of a national/international trend affecting other west coast estuaries.

Low tide counts are undertaken only every eight years or so. The 2013-14 counts indicated a considerable drop in dunlin numbers feeding on the mudflats. This was consistent with the regular high tide counts in that season. However, the annual monitoring showed that this was a one-off low season that affected all sites around Britain.

Long-running datasets are very rare but are extremely valuable in picking up both long-term and short-term changes. It is therefore important to continue with annual surveillance of wetland birds within the estuary system, both as part of the UK dataset and in terms of SSSI monitoring.

The effect of the Covid19 pandemic on the regular counts

Covid19 human movement restrictions came into force in late March 2020. This was after the date of the March 2020 WeBS count, so there was no effect in that season.

Surveillance of breeding shelduck in summer 2020 was affected, as the proximity of people on the boat was against the rules. Counts were done as far as possible from the land.

Covid restrictions had been relaxed in time for the September to December 2020 WeBS counts, but came into force again in January. These restrictions meant that several counters were not able to reach their regular sectors. However, regular counters living close to the estuary, plus a few other volunteers were able to cover all the major sectors except the Western Cleddau upstream of Little Milford and Angle Bay. The species totals suggest that a reasonable January count was achieved.

The BTO suspended all counts in February, and although restrictions were lifted somewhat by March, no counts were done then either. However, as most species peak counts occurred before February, meaningful data was still obtained for the season.

Normal counts were resumed for the 2021-22 season.

The lack of data from much of Britain during the 2020-21 season has meant that national peak counts and indices could not be calculated (Frost & Calbrade 2022). In this report, therefore, comparisons with the national picture can be made only until the 2019-20 season. 2021-22 data will not be available until spring 2023.

Numerical summary of importance

Most recent figures from the BTO website.

Species	Cleddau 5-year average (2015/16 – 2019/20)	UK threshold for national importance	Cleddau rank in a Welsh context
Wigeon	6555	4500	1
Greenshank	36	8	2
Dunlin	3788	3400	4
Light-bellied Brent	78	7	5
Curlew	1071	1200	4
Shelduck	368	470	7
Teal	2291	4300	2
Golden Plover	3514	4000	1
Little Egret	56	110	4
Little Grebe	27	150	5
Grey Heron	27	500	4
Lapwing	4810	6200	1
Snipe	137	10,000	4
Black-tailed Godwit	184	390	4
Redshank	688	940	5
Lesser Black-backed Gull	410	1200	4

CRYNODEB GWEITHREDOL

Mae Dyfrffordd Aberdaugleddau – system Aber Daugleddau ('system yr aber') oherwydd ei lleoliad cysgodol a'i gwastadeddau mwd agored yn safle gaeafu pwysig ar gyfer adar hirgoes ac adar dŵr.

Mae system yr aber o bwysigrwydd rhwngwladol oherwydd ei bod yn lletya bob gaeaf ar gyfartaledd dros 20,000 o adar dŵr o oddeutu 60 o rywogaethau. Mae o bwysigrwydd cenedlaethol i'r DU oherwydd ei phoblogaethau o wyddau duon Canada, chwiwellod, pibyddion y mawn a phibyddion coeswyrdd sy'n gaeafu yno. Mae ymhllith y pum safle pwysicaf yng Nghymru ar gyfer hwyaid yr eithin, corhwyaid, cwtiaid aur, cornchwiglod, gïachod cyffredin, rhostogod cynffonddu, y gylfinir, pibyddion coesgoch, crehyrod gleision, crehyrod bach a gwachod bach.

Mae tua 14.5% o adar dŵr Cymru yn system yr aber (ar safleoedd WeBS) ganol gaeaf, ac mae ychydig o dan 1% o adar dŵr y DU wedi'u cyfrif ar safleoedd WeBS.

- Mae **Gwyddau duon Canada** sy'n bridio yn Arctig Canada yn cynnwys system yr aber ymhllith eu safleoedd gaeafu / mudo. Mae niferoedd o bwysigrwydd cenedlaethol yn cael eu gweld yn gyson yn hedfan rhwng y Gann a Bae Angl.
- Mae bron pob **hwyaden yr eithin** yn Sir Benfro i'w gweld ar system yr aber yn ystod y gaeaf. Mae niferoedd hwyaid yr eithin sy'n gaeafu yma wedi gostwng ac mae hyn yn wir hefyd am y DU benbaladr. Gostyngodd llwyddiant bridio i'r lefel isaf erioed yn 2012 ond mae wedi gwella rhyw ychydig.
- Mae niferoedd y **chwiwellod** wedi cynyddu'n ddramatig ers 2003, yn enwedig ar Afon Penfro a Bae Angl. Cyn gynted ag y bydd un o'u hadnoddau bwyd (Zostera) wedi gorffen ganol gaeaf byddant yn mynd ymaith, unai i fannau eraill ar system yr aber neu allan o system yr aber yn gyfangwbl.
- Mae niferoedd y **corhwyaid** wedi amrywio dros y ddegawd ddiwethaf. Credir mai'r gyfres o aeafau mwyn diweddar a chynnydd yn yr ardaloedd sy'n cael eu gwarchod ar dir mawr Ewrop yw'r achos gan ganiatau i nifer fwy o adar aros ymhellach i'r gogledd a'r dwyrain.
- Mae cyfrif uchaf ganol gaeaf y **gylfinir** wedi gostwng ar system yr aber, a hefyd yn y DU (33% o ostyngiad mewn 25 mlynedd) ac yn Ewrop yn gyffredinol. Mae data, fodd bynnag, yn dangos bod system yr aber yn parhau i fod yn fan aros mudol pwysig i'r gylfinir.
- Mae niferoedd y **pibydd coeswyrdd** wedi cynyddu yn dilyn cyfnod o gyfrifon isel yn y 1990au. Mae system yr aber yn un o'r pymtheg safle gaeafu pwysicaf yn y DU ar gyfer y rhywogaeth yma ac mae bron i hanner yr adar sy'n gaeafu yng Nghymru i'w gweld yma.
- Cynyddodd poblogaeth **gwydd Canada** yn arw yn ystod y 1990au, yn unol â'r tueddiadau ar gyfer poblogaethau Cymru a'r DU. Mae'r adar i'w gweld gan amalaf rhwng Llangwm a Boulston, er eu bod hefyd yn bwydo mewn mannau y tu hwnt i'r aber. Nid oes dystiolaeth glir hyd yma eu bod yn cael effaith ar niferoedd neu ddosbarthiad rhywogaethau eraill o adar. Gallent, fodd bynnag, gael effaith ar y fflo'r trwy sathru a thrwy ewtroffigedd.
- Anaml y cofnodwyd **gwyddau gwylt** ar system yr aber cyn 2005 ond ers hynny maent wedi cynyddu i dros 100 (uchafswm o 140 yn 2018-19). Mae dystiolaeth

pellach eu bod yn bridio'n lleol, ac mae posibilrwydd y byddant yn achos pryder yn y dyfodol.

- Mae'r **crëyr glas** yn bridio ar dri phrif safle ar system aber y Cleddau ac roedd ganddynt tua 15 o nythod bob blwyddyn yn y 1990au. Mae'n ymddangos fod niferoedd y nythod wedi gostwng. Ysbeidiol yw'r cyfrifon, fodd bynnag, ac ni ellir dod i unrhyw gasgliad ynghylch y boblogaeth fridio.
- Er nad yw'r **gwyachod bach** bellach yn cyrraedd niferoedd o Bwysigrwydd Cenedlaethol ar system yr aber, mae 14% o boblogaeth gaeaf Cymru (ar safleoedd WeBS) i'w canfod yma a dyma'r pumed safle o bwysigrwydd iddynt yng Nghymru.

Mae'r rhan fwyaf o'r newidiadau ym mhoblogaethau'r adar ar system yr aber i'w gweld hefyd ar safleoedd eraill, unai yng Nghymru neu yn y DU benbaladr. Er enghraifft, mae'n bosib mai'r gyfres o aeafau mwyn rhwng 1995 a 2009 (sydd o bosibl neu efallai ddim yn awgrymu newid hinsawdd tymor hir) sydd i'w gyfrif am rai o'r newidiadau a welwyd yn niferoedd y rhai sy'n defnyddio'r aber yn y gaeaf. Mae'n golygu nad oes yn rhaid i'r adar deithio cyn belled i'r de ac / neu i'r gorllewin i osgoi tywydd garw'r gaeaf. Mae data yn awgrymu bod nifer fawr o adar yn fwy tebygol o ymweld â system yr aber yn ystod cyfnodau o dywydd eithafol. Yn ystod cyfnodau o dywydd arferol byddai'n well ganddynt amgylchiadau (a hefyd gwell cyflenwad bwyd) yr arfordir dwyreiniol.

Gallai'r cynnydd mewn ardaloedd sy'n cael eu gwarchod ar dir mawr Ewrop effeithio dosbarthiad adar yn y gaeaf. O ganlyniad mae adar e.e. corhwyaid sydd yn agored i bwysau hela, yn aros yn yr ardaloedd hynny.

Mae cyfrifon a wnaethwyd yn 1997 – 98, 2005 – 06 a 2013 – 14 pan fo'r môr ar drai yn dangos mai Afon Penfro, Bae Angl, Pwynt Fowborough, Afon Caeriw ac Aber Gann yw prif ardaloedd bwydo y rhan fwyaf o rywogaethau.

Mae'r data atodol a gasglwyd yn ystod arolygon bridio blynnyddol hwyaid yr eithin ym mis Mehefin / Gorffennaf a dechrau Awst ers 1992 wedi dangos pwysigrwydd system yr aber fel man aros wrth fudo i nifer o rywogaethau eraill, yn abennig y gylfinir.

Mae system aber y Cleddau yn parhau i fod o bwysigrwyddd rhyngwladol i adar gwlyptiroedd ar gyfer gaeafu a mudo ac mae'n hollbwysig fod ystod lawn o'u hanghenion (e.e. cynefin bwydo o ansawdd da heb ymyrraeth a chlwydi llanw uchel) yn parhau i gael eu darparu yma.

Pam y mae angen i ni barhau i gyfrif?

Bydd monitro blynnyddol yn dangos tueddiadau yn niferoedd yr adar ar lefelau lleol a chenedlaethol a bydd yn tynnu sylw at newidiadau fydd efallai angen ystyriaeth neu ymchwiliad pellach (e.e. ansawdd y dŵr a defnydd adloniadol) yn system yr aber.

Er enghraifft, yn ystod gaeaf 2012-13 cyrhaeddodd y chwiwelod ym mis Medi fel arfer ond gadawsant yn gynnar ac roedd y cyfrif uchaf rhyw 3000 yn is nag yn ystod y gaeafau blaenorol. Roedd y cyfrif uchaf 1200 yn is eto yn 2013 – 14 ond cafwyd gwelliant dros y ddau aeaf dilynol. Ers 2018 – 19, mae canran uwch wedi bod yn defnyddio Bae Angl.

Efallai mai digwyddiad unwaith mewn amser neu ddigwyddiadau tymor byr yw'r rhain. Mae'n bosibl mai digwyddiadau oddi ar yr aber achosodd hyn; efallai mai rhyw ymyrraeth

wnaeth gadw'r adar draw neu efallai ei fod yn dangos rhywfaint o newid (dros dro) yn y cyflenwad bwyd yn Afon Penfro a Bae Angl.

Yn gynnar yn y 1990au disgynnodd niferoedd y pibydd coesgoch i'w hanner, ond maent wedi bod yn weddol sefydlog ers hymny. Mae hyn yn rhan o duedd cenedlaethol/rhyngwladol sy'n effeithio aberoedd eraill ar arfordir y gorllewin.

Dim ond bob rhyw wyth mlynedd y gwneir cyfrifon pan fo'r môr ar drai. Roedd cyfrifon 2013 – 14 yn dangos gostyngiad sylweddol yn niferoedd pibyddion y mawn oedd yn bwydo ar y gwastadeddau llaid. Roedd hyn yn cydfynd â chyfrifon llanw uchel rheolaidd y tymor hwnnw. Roedd y monitro blynyddol, fodd bynnag, yn dangos mai tymor o gyfrifon isel eithriadol ydoedd a'i fod yn effeithio pob safle o amgylch Prydain.

Mae setiau data tymor hir yn brin iawn ond maent yn eithriadol o werthfawr am eu bod yn amlyu newidiadau tymor byr a thymor hir. Mae hi felly yn bwysig parhau i gynnal gwyliadwriaeth flynyddol o adar y gwlyptiroedd o fewn system yr aber, fel rhan o set ddata'r DU yn ogystal ag yn nhermau monitro'r SoDdGA.

Effaith y pandemig Covid 19 ar y cyfrifon rheolaidd

Diwedd Mawrth 2020 oherwydd y pandemig Covid 19 bu cyfyngu ar hawl pobl i deithio. Roedd hyn ar ôl dyddiad cyfrif WeBS fis Mawrth 2020, felly ni chafodd y cyfyngiadau unrhyw effaith yn ystod y tymor hwnnw.

Cafodd y cyfyngiadau effaith, fodd bynnag, ar wyliadwriaeth bridio hwyaid yr eithin yn haf 2020 a hymny gan na chaniateid, yn unol â'r rheolau, i bobl eistedd wrth ochr ei gilydd ar gwch. Cafodd cyfrifon eu gwneud, cyn belled â phosib, o'r tir.

Roedd cyfyngiadau Covid wedi'u llacio erbyn cyfrifon WeBS Medi i Ragfyr 2020 ond daethant i rym unwaith eto ym mis Ionawr. Golygai'r cyfyngiadau yma na allai nifer o'r rhai oedd yn cyfrif gyrraedd eu sectorau arferol. Fodd bynnag, gyda chymorth rhai gwirfoddolwyr eraill, llwyddodd y rhai oedd yn cyfrif yn rheolaidd ac yn byw yn agos at yr aber i gyrraedd yr holl brif sectorau ac eithrio'r Cleddau Orllewinol i fyny'r afon o Little Milford a Bae Angl. Mae cyfanswm y rhywogaethau yn awgrymu bod cyfrif rhesymol wedi'i gyflawni ym mis Ionawr.

Ataliwyd pob cyfrif BTO ym mis Chwefror, ac er bod cyfyngiadau wedi'u codi i ryw raddau erbyn mis Mawrth, ni wnaethpwyd unrhyw gyfrif yr adeg honno ychwaith. Fodd bynnag, gan fod y rhan fwyaf o gyfrifon uchaf y rhywogaethau wedi digwydd cyn mis Chwefror, llwyddwyd i gael data ystyrlon ar gyfer y tymor.

Ail ddechreuwyd ar y cyfrifon arferol yn ystod tymor 2021 – 22.

Mae'r diffyg data o'r rhan fwyaf o Brydain yn ystod tymor 2020-21 wedi golygu na ellid cyfrifo cyfrifon uchaf a mynegrifau cenedlaethol (Frost & Calbrade 2022). Yn yr adroddiad yma, felly, dim ond hyd at dymor 2019 – 20 y gellir cymharu gyda'r darlun cenedlaethol. Ni fydd data 2021 – 22 ar gael tan Y Gwanwyn 2023

Crynodeb rhifiadol pwysig

Y ffigurau diweddaraf o wefan BTO

Rhywogaeth	Cleddau – cyfartaledd 5 mlynedd (2015 /16 – 2019/20)	Trothwy'r DU ar gyfer pwysigrwydd cenedlaethol	Lleoliad Cleddau yng nghyd-destun Cymru
Chwiwell	6555	4500	1
Pibydd coeswyrrdd	36	8	2
Pibydd y mawn	3788	3400	4
Gwydd ddu	78	7	5
Y Gylfinir	1071	1200	4
Hwyaden yr eithin	368	470	7
Corhwyaden	2291	4300	2
Cwtiad aur	3514	4000	1
Crëyr bach	56	110	4
Gwyach fach	27	150	5
Crëyr glas	27	500	4
Cornchwiglen	4810	6200	1
Giach gyffredin	137	10,000	4
Rhostog gynffonddu	184	390	4
Pibydd coesgoch	688	940	5
Gwylan gefnddu leiaf	410	1200	4