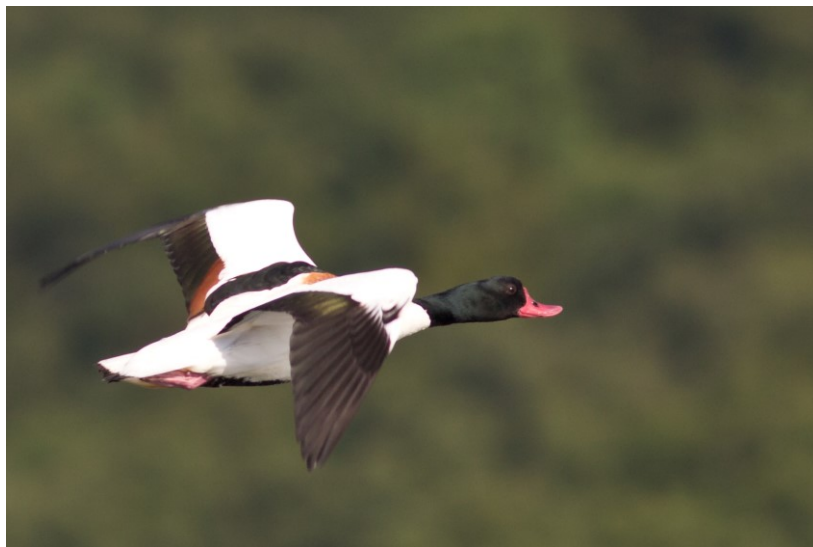




MILFORD HAVEN WATERWAY
ENVIRONMENTAL SURVEILLANCE GROUP

GRŴP CADW GOLWG AMGYLCHEDDOL
AR DDYFRFFORDD ABERDAUGLEDDAU



**Daugleddau Estuary and Milford Haven Waterway
Annual Surveillance of Summer Shelduck Populations
2022**

J E Hodges

**Daugleddau Estuary and Milford Haven Waterway
annual surveillance of summer shelduck populations, 2022**

**A report to the Milford Haven Waterway Environmental Surveillance
Group**

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October 2022

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COVER IMAGE: Female shelduck. Photo: Mike Camplin

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Daugleddau Estuary and Milford Haven Waterway: annual surveillance of summer shelduck populations 2022

EXECUTIVE SUMMARY

The Daugleddau Estuary and Milford Haven Waterway hold regionally important numbers of shelducks during the winter months. There is also a small summer population that has been the subject of annual surveillance between 1991 and 2021. In 2022, the annual surveillance of summer shelduck populations was repeated as part of a programme of environmental surveillance work in the estuary system coordinated by the Milford Haven Waterway Environmental Surveillance Group (MHWESG).

The aims, objectives and methods used to carry out the annual surveillance, and the data obtained, are described in this report.

The total number of broods seen in the estuary system during the 2022 annual surveillance was ten, four fewer than in 2021 (which was, along with the 2019 breeding season, the best since 2006), and it was the lowest number of broods recorded during the surveys since 2017 (when seven broods were recorded). Since 2018, the number of broods seen in the estuary system during the annual surveillance has fluctuated between 10 and 14, and no clear upwards or downwards trend has emerged during this period.

The overall mean brood size was marginally higher in 2022 than it was in the preceding four seasons.

As in previous years, predation (by avian and/or mammalian predators) is likely to have been a (or the most) significant factor affecting the number and sizes of broods recorded in the estuary system during the 2022 surveys. Adverse weather conditions (e.g., heavy rain accompanied by low temperatures) in late April, May and June can impact on the survival of eggs to hatching and/or recently hatched ducklings. In 2022, however, it is very unlikely that the weather conditions during the spring (April-June) had any significant impact on nesting shelducks, the number of ducklings that managed to make it onto the water after leaving their nests or the survival of young once they had reached the water.

Disturbance e.g., from recreational activities (on land and/or on the water) may also affect breeding success and subsequent survival of young. Levels of recreational activity on the Milford Haven Waterway in 2022 were significantly higher than pre-pandemic levels, especially paddle-boarding and kayaking (the latter being an activity that takes place in the upper, quieter reaches of the Daugleddau Estuary). Given the relatively high levels of waterborne recreation in the summer 2022, it is perhaps inevitable that there will have been some interaction between recreational users and wildlife. However, there were no reports or documented evidence of disturbance of shelducks as a consequence of waterborne recreational activities in the estuary system in 2022.

Other factors such as the extent and quality of foraging habitat may have affected the survival and development of the young in parts of the estuary system. These are, however, not known or understood.

The number of non-breeding shelducks seen in June 2022 was 52, nearly twice the number seen in 2021. It is highly likely that the increase in the numbers of non-breeders present in spring is directly linked to the much higher numbers of shelducks present in the estuary system in the late winter of 2021/22 than in the previous few years.

Data collected for other wetland birds once again underlined the importance of the estuary system during migration, especially for species such as curlew.

The report concludes with a recommendation that the annual surveillance of the summer shelduck population in the estuary system be continued as part of the MHWESG's annual work programme. In addition to this recommendation, potential lines of inquiry into the distribution and abundance of the favoured prey of shelducks (the mud snail *Peringia ulvae*) and links to factors affecting environmental conditions in the estuary system are identified for further consideration by the MHWESG and/or individual group members.

Aber Daugleddau a Dyfrffordd Aberdaugleddau: gwyliadwriaeth flynyddol o boblogaethau haf hwyaid yr eithin, 2022

CRYNODEB GWEITHREDOL

Yn ystod misoedd y gaeaf, ceir niferoedd o hwyaid yr eithin o bwysigrwydd rhanbarthol yn Aber Daugleddau ac ar Ddyfrffordd Aberdaugleddau. Ceir hefyd boblogaeth haf fechan y bu gwyliadwriaeth flynyddol arni rhwng 1991 a 2021. Yn 2022, cafodd y wylidwriaeth flynyddol o boblogaethau haf hwyaid yr eithin ei gwneud drachefn fel rhan o raglen waith gwyliadwriaeth amgylcheddol yn system yr aber. Grŵp Gwyliadwriaeth Amgylcheddol Dyfrffordd Aberdaugleddau (MHWESG) wnaeth gyd-gysylltu'r gwaith.

Disgrifir yn yr adroddiad yma y nodau, yr amcanion a'r dulliau a ddefnyddiwyd i gwblhau'r wylidwriaeth flynyddol ynghyd â'r data a gasglwyd.

Gwelwyd cyfanswm o 10 nythaid yn system yr aber yn ystod gwyliadwriaeth flynyddol 2022, pedwar yn llai nag yn 2021 (a oedd ynghyd â thymor bridio 2019, y gorau ers 2006). Dyma'r nifer isaf o nytheidiau a gofnodwyd yn ystod y gwyliadwriaethau ers 2017 (pan gofnodwyd saith nythaid). Ers 2018, mae'r nifer o nytheidiau a welwyd yn system yr aber yn ystod y wylidwriaeth flynyddol wedi bod yn amrywio rhwng 10 ac 14 ac nid oes ar hyn o bryd unrhyw duedd clir at i fyny nac at i lawr.

Roedd maint cymedrig y nythaid yn gyffredinol fymryn yn uwch yn 2022 nag ydoedd yn ystod y pedwar tymor blaenorol.

Fel yn ystod y blynyddoedd blaenorol, ysglyfaethu (gan ysglyfaethwyr adarol a / neu famalaidd) sy'n debygol o fod y ffactor arwyddocaol (os nad y mwyaf arwyddocaol) s'yn effeithio'r niferoedd a maint y nytheidiau a gofnodwyd yn system yr aber yn ystod arolygon 2022. Gall tywydd gwael (e.e. glaw trwm ynghyd â thymereddau isel) ddiwedd Ebrill ac ym mis Mai a Mehefin effeithio ar allu'r wyau i oroesi hyd amser deor a / neu ar gywion hwyaid sydd newydd ddeor. Yn 2022, fodd bynnag, mae'n anhebygol iawn fod amgylchiadau'r tywydd yn ystod y Gwanwyn (Ebrill – Mehefin) wedi cael unrhyw effaith arwyddocaol ar hwyaid yr eithin oedd yn nythu, nifer y cywion hwyaid wnaeth lwyddo i gyrraedd y dŵr unwaith yr oeddent wedi gadael eu nythod neu ar oroesiad y cywion unwaith iddynt gyrraedd y dŵr.

Gallai ymyrraeth e.e. oddi wrth weithgareddau adloniadol (ar y tir a / neu ar y dŵr) hefyd effeithio llwyddiant y bridio ac o ganlyniad goroesiad y cywion hwyaid. Roedd lefelau'r adloniant dŵr ar Ddyfrffordd Aberdaugleddu yn 2022 yn arwyddocaol uwch na'r lefelau cyn y pandemig, yn enwedig yn achos padl fyrddio a chaiacio (gweithgaredd sy'n digwydd ym mannau uchaf a thawelach Aber Daugleddau). O ystyried y lefelau cymharol uchel o adloniant dŵr yn ystod haf 2022, efallai ei bod yn anochel y byddai rhywfaint o ryngweithiad rhwng y rhai oedd yn defnyddio'r dŵr ar gyfer adloniant a bywyd gwyllt. Nid oedd, fodd bynnag, unrhyw adroddiadau na

thystiolaeth wedi'i gofnodi ynghylch aflonyddu ar hwyaid yr eithin o ganlyniad i weithgareddau dŵr adloniadol yn system yr aber yn 2022.

Gallai ffactorau eraill fel maint ac ansawdd porthiant y cynefin fod wedi effeithio goroesiad a datblygiad y cywion ifanc mewn rhannau o system yr aber. Nid oes gwybodaeth na dealltwriaeth ynglŷn â hyn.

Ym mis Mehefin 2022 gwelwyd 52 o hwyaid yr eithin oedd ddim yn bridio, bron ddwywaith y nifer a welwyd yn 2021. Mae'n bosibl iawn fod cyswllt uniongyrchol rhwng y cynnydd yn niferoedd hwyaid yr eithin oedd ddim yn bridio ac a oedd yn bresennol yn y Gwanwyn â'r niferoedd llawer uwch nag yn ystod yr ychydig flynyddoedd blaenorol o hwyaid yr eithin oedd yn bresennol yn system yr aber ddiwedd Gaeaf 2021/22.

Roedd y data a gasglwyd ar gyfer adar eraill y gwlyptiroedd unwaith eto'n pwysleisio pwysigrwydd system yr aber yn ystod y cyfnod ymfudo, yn enwedig yn achos rhywogaethau fel y gylfinir.

Mae'r adroddiad yn cloi trwy argymhell fod y wylidwriaeth flynyddol o boblogaeth haf hwyaid yr eithin yn system yr aber yn parhau fel rhan o raglen waith flynyddol MHWESG. Yn ogystal â'r argymhelliad yma, nodir y gallai MHWESG, aelodau grwpiau unigol neu drydydd person addas edrych ar ddsbarthiad ac amllder hoff ysglyfaeth hwyaid yr hesg (sef malwoden y llaid *Peringia ulvae*) a hefyd ar y cysylltiadau â ffactorau sy'n effeithio amgylchiadau amgylcheddol yn system yr aber.

