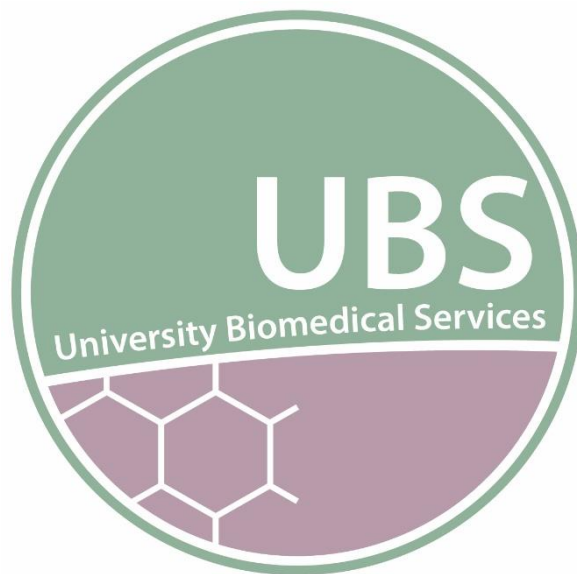


UNIVERSITY OF CAMBRIDGE

UNIVERSITY BIOMEDICAL SERVICES

Guidance on the Movement of Protected Animals

(Zebrafish to or from the AMB,
LMB, PDN aquatics facilities only)



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INTRODUCTION

Genetically Altered (GA) fish are being developed in many research establishments around the world and their use published in peer-reviewed publications. This has created a desire for these animals to be used in similar research programmes and the need for the animals to be transferred between establishments both within the UK and between other countries. The transport of sperm, or embryos should always be considered rather than the movement of older animals providing there is the relevant license authority and facilities to reconstitute the line on arrival at the destination.

In the UK the GA animals used in research are protected under the authority of *The Animals (Scientific Procedures) Act 1986*. The movement of such animals between establishments is strictly controlled under this Act and other associated legislation.

Both the Covid pandemic and the UK exit from Europe pose serious risks for the welfare of animals in transit between countries, for these reasons researchers have been asked not to import or export live animals unless it is absolutely necessary. Where it is absolutely necessary to move animals it is important we undertake thorough due diligence checks. Appendix 1 (Due diligence for animal transport across international borders)

The University of Cambridge must ensure that animals being imported into, and exported from, the UBS facilities comply with these requirements and follow the due diligence guidance to meet the strict health and welfare standards required by the University.

The following notes will assist you in understanding these requirements and the procedures expected to be always followed for the movement of fish into and out of the University. It is very important that we maintain the continued high welfare and health status of our animal colonies, and adherence to the required legislative requirements.

MOVEMENT OF PROTECTED ANIMALS

THE LAW

Animals that are protected under the authority of *The Animal (Scientific Procedures) Act 1986* can only be housed and used for experimental purposes within a Home Office Designated Establishment and under the authority of a Project Licence.

In order to comply with the requirements of the Act the movement of such animals must be authorised by the Home Office, by having written authority within the relevant Project Licence to supply and for the destination to have authority to receive animals of that type.

It is the responsibility of the Project Licence holder to ensure that records of movements of protected animals are kept as animals are transferred to or from the authority of their licences.

Additionally, there is legislation controlling the actual transportation of live animals, being imported into the UK from overseas and exported out of the UK. For this an Import Licence and an export licence is required from the Centre of Environmental Fisheries and Aquaculture Science (CEFAS). A list of countries we can import from is within appendix 3.

Controls are also in place to protect animals whilst being transported within the UK under Council Regulation (EC) No 1/2005.

In all cases advice must be sought from both the Named Animal Care and Welfare Officer (NACWO) and of the Named Veterinary Surgeon (NVS), before arranging to transfer or receive animals from any external sources.

TRANSFER OF ANIMALS WITHIN THE UK

The following guidance will assist in the transfer of Protected Animals between the University of Cambridge and other Designated Establishments in the UK. All requests to transfer animals **MUST** be made to the Import and Export Coordinator or the unit NACWO.



TRANSFER TO UK DESIGNATED ESTABLISHMENTS

Protected Animals may be transferred to the authority of Project Licences held at other UK Designated Establishments. This can only be done if one of the following authorities is in place:

1. A condition authorising the movement is provided on the receiving Establishment Licence.
2. A condition authorising the movement is provided on the receiving and supplying Project Licence.

PROCEDURE FOR ANIMALS WHICH WILL BE 5DPF OR OLDER UPON ARRIVAL AT DESIGNATION (PROTECTED UNDER ASPA)

- A request to transfer animals from a University Biological services unit to another University Biological Services Unit must be made to the unit NACWO who will check the health status and determine if quarantine is required and will liaise with the researchers directly. The NACWO will arrange animal transport with the AMB stores department and liaise with the technicians to ensure the animals

are received at the final destination and unpacked immediately. Records of movement are to be recorded on the google drive 'lines imported and exported' document by the NACWO. Where quarantine is used, the quarantine track sheet must also be updated by the NACWO

- A request to transfer animals from a University Biological Services Unit to an external establishment must be made to the import and export co-ordinator with the facility NACWO copied in.
- An Animal movement form (Appendix 2) will be provided for internal and external movements and should be completed with as much detail as possible.
- The Import and Export coordinator will make contact with the external receiving establishment to:
 - Provide them with the microbiological health screen of the supplying facility or individual animals.
 - Determine if authority to transfer is provided in the receiving Project Licence and on the Establishment Licence.
 - Determine if authority to transfer is on the supplying Project License.
- Once the above is in place, the process of arranging the transport of the animals can begin.
 - The import / export co-ordinator will confirm with the facility NACWO and sending researcher and receiving facility the date to send the animals
- A specialist, UBS approved licensed courier will be selected by the co-ordinator and a date arranged for the transfer. All vehicles must be secure and climate controlled to at least 22c.



- For animal movement within the UK: On the day of transfer UBS staff will box any animals over 30dpf in transport containers with small holes in the lids, label and prepare them for collection. Animals less than 30dpf on arrival, will be held in falcon tubes, clearly labelled. These will be placed within tightly sealed, non-transparent boxes which should contain heat packs and bubble wrap to maintain the animals for longer than the expected journey time.
- The receiving establishment will provide confirmation of safe receipt to the NACWO (for internal movement) or the Import/Export co-ordinator for external movement.
- Records of movement are to be recorded on the google drive 'lines imported and exported' document by the NACWO. Where quarantine is used, the quarantine track sheet must also be updated by the NACWO

TRANSFER FROM UK DESIGNATED ESTABLISHMENTS – OVER 5DPF UPON ARRIVAL.

Protected Animals may be transferred to Project Licences held at the University of Cambridge from other UK Designated Establishments. This can only be done if the following authority is in place:

1. There is a Project Licence in place authorising the movement, on both the supplying and receiving Project Licences.

PROCEDURE FOR ANIMALS WHICH WILL BE 5DPF OR OLDER UPON ARRIVAL AT DESIGNATION

- A request to transfer animals from a University Biological Services Unit must be made to the unit NACWO who will check the health status and determine if quarantine is required and will liaise with the researchers directly. The NACWO will arrange animal transport with the AMB stores department and liaise with the technicians to ensure the animals are received at the final destination and unpacked immediately. Records of movement are to be recorded on the google drive 'lines imported and exported' document by the NACWO. Where quarantine is used, the quarantine track sheet must also be updated by the NACWO
- A request to transfer animals from an external establishment must be made to the import and export co-ordinator with the facility NACWO copied in.
- An Animal Transfer Form (Appendix 2) will be provided for internal and external movements and should be completed with as much detail as possible.

The Import and Export coordinator will contact the external supplying establishment to:

- Request the previous 3 health screens (one of which must be no older than 6 months since conducted) and the screening methodology or that of the individual animals to be transferred.

- Determine if authority to transfer is provided in the supplying and receiving Project Licence and on the Establishment Licence.
- If the microbiological health screen is acceptable to the NVS & NACWO the process of transporting the animals can begin. The NACWO will also need to save the screening results on the aquatics shared drive.
- The Import and Export coordinator will contact the receiving unit NACWO to:
 - Confirm the date the animals can be received
 - To confirm the requesting researcher is aware of the quarantine process required for the animals and has agreed to this
- The Unit NACWO will then complete the quarantine track sheet on the shared drive with the importation details for future tracking.
- Contact will be made with the source establishment by the co-ordinator to begin the transport process. Only specialist, UBS approved, and licensed couriers will be used and a date arranged for the transfer.
- On the day of receipt, the UBS staff will unpack the animals and check their well-being before being placed in home tanks. they will inform the NACWO and co-ordinator of receipt, they will inform the researcher and supplying facility. Any welfare or health issues will be reported immediately to the NACWO and NVS
- The receiving unit will provide confirmation of safe receipt or report any issues to the source establishment and NACWO on arrival and inform the researcher. The quarantine excel sheet within the aquatics shared drive will then be updated to reflect the importation details by the NACWO. Armis will be updated with line information and the tanks clearly labelled.
- If the microbiological health screen is not acceptable then an alternative solution will be discussed with the research group by the NACWO. This may include sourcing from an alternative establishment, holding animals in a facility

of lower health status, using a commercial source, cryopreservation and IVF or holding the animals in a quarantine facility for breeding and re screening. The NACWO and researcher must ensure the relevant GA Breeding and cryopreservation / IVF protocols are in the Project Licence that will facilitate this.

- If animals are to be held in a quarantine area and / or re screened to confirm the health status, their eggs will only be released from quarantine on receipt of a satisfactory health report. This cost must be met by the research group.
- Animals should not be disturbed, used for scientific procedures or setup for breeding for at least 7 days to allow acclimatisation, post arrival.
- Animals transferred for tissue collection only can be culled on arrival.

TRANSFER TO UK DESIGNATED ESTABLISHMENTS – LESS THAN 5DPF UPON ARRIVAL

Protected Animals may be transferred to the authority of Project Licences held at other UK Designated Establishments. This can only be done if one of the following authorities is in place:

2. A condition authorising the movement is provided on the receiving Establishment Licence.
3. A condition authorising the movement is provided on the receiving and supplying Project Licence.

PROCEDURE FOR EMBRYOS WHICH WILL BE LESS THAN 5DPF UPON ARRIVAL AT DESIGNATION (NOT PROTECTED UNDER ASPA)

- A request to transfer animals to a University Biological Services Unit must be made to the unit NACWO who will check the health status and determine if

quarantine is required and will liaise with the researchers directly. The NACWO will arrange animal transport with the AMB stores department and liaise with the technicians to ensure the animals are received at the final destination and unpacked immediately. Records of movement are to be recorded on the google drive 'lines imported and exported' document by the NACWO. Where quarantine is used, the quarantine track sheet must also be updated by the NACWO

- A request to transfer animals of less than 5dpf (at the time of arrival at their designation) from a University Biological Services Unit to an external establishment must be made to the import and export co-ordinator with the facility NACWO copied in.
- An Animal movement form (Appendix 2) will be provided for internal and external movements and should be completed with as much detail as possible.
- The Import and Export coordinator will make contact with the external receiving establishment to:
 - Provide them with the microbiological health screen of the supplying facility or individual animals.
 - Determine if authority to transfer is provided in the receiving Project Licence and on the Establishment Licence.
 - Determine if authority to transfer is on the supplying Project License.
- Once the above is in place, the process of arranging the transport of the animals can begin.
 - The import / export co-ordinator will confirm with the facility NACWO and sending researcher and receiving facility the date to send the eggs
- A specialist, UBS approved licensed courier will be selected and a date arranged for the transfer (as agreed with the researcher and NACWO) unless

the researcher is moving the animals themselves; within their own vehicle. All vehicles must be secure and climate controlled to at least 22c, this can be achieved with heat packs inside the container housing the eggs / fry.

- If the researcher would prefer to move the eggs / fry themselves, the above export procedures and animal movement form must still be followed to comply with CEFAS regulations and provide to the NACWO and co-ordinator. NOTE: exports to Jersey, Guernsey, Isle of Man and Northern Ireland must be by courier. The researcher must also have a second point of contact, their details must be on the outside of the transport container as an emergency contact. The researcher must advise their second point of contact of their expected arrival time at the designation. Upon arrival the researcher must inform their point of contact of their arrival, if this should not occur at the previously discussed expected arrival time, the point of contact must reach out to the researcher to confirm they are OK. It is the researchers responsibility to ensure they comply with the CEFAS and the Animals Transportation Act.



- On the day of transfer UBS staff (if using a courier) or researcher (if moving themselves) will move the eggs/ fry to Falcon tubes, clearly labelled. These will be placed within tight sealed, non-transparent boxes which should contain heat packs and bubble wrap to maintain the animals for longer than the expected journey time at 22c or above.
- The receiving establishment will provide confirmation of safe receipt to the researcher and NACWO.

TRANSFER FROM UK DESIGNATED ESTABLISHMENTS – LESS THAN 5DPF UPON ARRIVAL

Protected Animals may be transferred to Project Licences held at the University of Cambridge from other UK Designated Establishments. This can only be done if the following authority is in place:

4. There is a Project Licence in place authorising the movement, on both the supplying and receiving Project Licences.

PROCEDURE FOR EMBRYOS WHICH WILL BE LESS THAN 5DPF UPON ARRIVAL AT DESIGNATION

- A request to transfer animals from a University Biological Services Unit must be made to the unit NACWO who will check the health status and determine if quarantine is required and will liaise with the researchers directly. The NACWO will arrange animal transport with the AMB stores department and liaise with the technicians to ensure the animals are received at the final destination and unpacked immediately. Records of movement are to be recorded on the google drive 'lines imported and exported' document by the NACWO. Where quarantine is used, the quarantine track sheet must also be updated by the NACWO
- A request to transfer animals from an external establishment must be made to the import and export co-ordinator with the facility NACWO copied in.
- An Animal Transfer Form (Appendix 2) will be provided for internal and external movements and should be completed with as much detail as possible.

The Import and Export coordinator will contact the external supplying establishment to:

- Request the previous 3 health screens (one of which must be no older than 6 months since conducted) and the screening methodology or that of the individual animals to be transferred.

- Determine if authority to transfer is provided in the supplying and receiving Project Licence and on the Establishment Licence.
- If the microbiological health screen is acceptable to the NVS & NACWO the process of transporting the animals can begin. The NACWO must save these onto the aquatics shared drive.
- The Import and Export coordinator will contact the receiving unit NACWO to:
 - Confirm the date the animals can be received
 - To confirm the requesting researcher is aware of the quarantine process required for the animals and has agreed to this
- The Unit NACWO will then complete the quarantine track sheet on the shared drive with the importation details for future tracking.
- A specialist, UBS approved licensed courier will be selected and a date arranged for the transfer unless the researcher is moving the animals themselves either within their own vehicle. All vehicles must be secure and climate controlled to at least 22c, this can be achieved with heat packs inside the container housing the eggs / fry.
- If the researcher would prefer to move the eggs / fry themselves, the above export procedures and animal movement form must still be followed to comply with CEFAS regulations and provide to the NACWO and co-ordinator. NOTE: exports to Jersey, Guernsey, Isle of Man and Northern Ireland must be by courier. The researcher must also have a second point of contact, their details must be on the outside of the transport container as an emergency contact. The researcher must advise their second point of contact of their expected arrival time at the designation. Upon arrival the researcher must inform their point of contact of their arrival, if this should not occur at the expected arrival time, the point of contact must reach out to the researcher to confirm they are OK. It is the researchers responsibility to ensure they comply with the CEFAS and the Animals Transportation Act.

- On the day of receipt, the UBS staff will unpack the eggs/ fry and check their well-being before being placed in home tanks or incubator (dependant on developmental stage). Any welfare or health issues will be reported immediately to the NACWO and NVS
- The receiving unit will provide confirmation of safe receipt or report any issues to the source establishment on arrival and inform the researcher and co-ordinator on arrival. The quarantine excel sheet within the aquatics shared drive will then be updated to reflect the importation details. Armis will be updated and labels printed.
- If the microbiological health screen is not acceptable then an alternative solution will be discussed with the research group by the NACWO. This may include sourcing from an alternative establishment, holding animals in a facility of lower health status, using a commercial source, cryopreservation and IVF or holding the animals in a quarantine facility for breeding and re screening. You must ensure the relevant GA Breeding and cryopreservation / IVF protocols are in the Project Licence that will facilitate this.
- If animals are to be held in a quarantine area and / or re screened to confirm the health status their eggs will only be released from quarantine on receipt of a satisfactory health report. This cost must be met by the research group.
- Animals should not be disturbed or used for scientific procedures for at least 7 days to allow acclimatisation, post arrival.
- Animals transferred for tissue collection only can be culled on arrival.

IMPORT & EXPORT OF ANIMALS OVERSEAS

The following guidance will assist in the transfer of Protected Animals between establishments outside of the UK and the University of Cambridge.

All requests to transfer animals MUST be made to the Import and Export coordinator with the NACWO copied in from where animals are to be transferred from.

TRANSFER TO OVERSEAS ESTABLISHMENTS – ALL AGES

Protected Animals may be transferred to animal facilities in other countries. This can only be done if the following authority is in place:

A statement authorising the movement is provided on the supplying Project Licence and all legislative requirements of the receiving country are met. (Requirements do vary from country to country so it is important to verify exactly what is needed).

PROCEDURE

- A request to transfer animals from a UBS facility should be made to the Import and Export coordinator with the NACWO copied in.
- An Animal Transfer Form (Appendix 2) will be provided and should be completed with as much detail as possible.
- The Import and Export coordinator will make contact with the receiving establishment to:
 - Provide them with a current microbiological health screen.
 - Determine what other legislative requirements there are, if any.
 - Check the CEFAS licence for exportation is within date, covers the species and provide a copy to the receiving facility

- A specialist, UBS approved licensed courier will be selected and a date arranged for the transfer by the imports / exports co-ordinator in liaison with the sending researcher and NACWO.
- If the microbiological health screen is accepted the process of transporting the animals can begin.
- The Import and Export co-ordinator must check with the Competent Authority or Official Service responsible for aquatic animal health in the destination country to establish the entry requirements for live aquatic animals and what animal health certificate is required. The courier may be able to advise on this also.
 - For exports to the EU and movements to Northern Ireland (NI), the imports and exports co-ordinator must provide the FHI (fhi@cefas.co.uk) with a copy of the written advice and animal health certification requirements for entry from the competent authority in the destination country.
 - For Movements to Crown Dependencies (Jersey, Guernsey, Isle of Man), the co-ordinator must provide the FHI with a copy of the written advice and animal health certification requirements for entry from the competent authority in the destination country. Note: For exports to the EU and movements to Northern Ireland your shipment must be checked and cleared at an EU Border Control Post (BCP) or Point of Entry (POE) designated to accept the goods in your consignment. For Northern Ireland these are located at Larne (XILAR1-DAERA) and Belfast (XIBEL1- DAERA) only.
 - For exports to outside of the EU, the co-ordinator must provide the FHI with a copy of the written advice and disease declaration requirements for entry from the competent authority in the destination country and a copy of the animal health certificate being requested.

Once approval is granted by the FHI:

- For exports to the EU and movements to NI, the NACWO must contact an OV (our NVS) to make arrangements for them to inspect the consignment

and issue the required health certificate (as requested by the receiving country competent authority) up to 72 hours before departure. The NACWO must send the completed health certificate to the co-ordinator and add this to the outside of the parcel prior to shipping.

- For Movements to Crown Dependencies (Guernsey, Jersey, Isle of Man), a Fish Health Inspector will contact the co-ordinator to arrange inspection up to 72hrs prior to the departure.
 - For exports to the rest of the world, a Fish Health Inspector may contact the co-ordinator to arrange inspection up to 72hrs prior to the departure. If an OV is required to sign the animal health certificate you must follow the guidance under 'For exports to EU and movements to NI'
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- The co-ordinator must submit Export Notification Form (EXP1), completed in full and signed either electronically or by hand, at least 5 working days prior to the date of export. This form is completed by the NACWO. The most up to date EXP1 must be used and can be found on GOV.UK - Form EXP1: Notification to export live fish and shellfish - [PowerPoint Presentation \(publishing.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/614421/EXP1_Presentation.pdf)
 - The EXP1 form will be validated by the FHI. If it passes validation, the FHI will produce the appropriate certificate and the co-ordinator will receive a confirmation email containing all the relevant associated documents. These must be sent to the NACWO and added to the outside of the parcel by the NACWO. Note: commodity codes can be found here: <https://www.trade-tariff.service.gov.uk/sections>
 - An Authorised Operators Health Declaration will need to be completed by the NACWO and NVS and added to the parcel.. A copy of this is on the aquatics shared drive ' Authorised Operator Health Declaration'.
 - For all consignments, a legible and visible label must be displayed on the exterior of all containers which clearly links the consignment to the animal health certificate. This must be completed and added by the NACWO or

technician packing the animals. It must also contain the following information: The number of containers in the consignment, the name of the species present in each container, the number of animals in each container for each of the species present and the purpose for which the animals are intended. A copy of this document is on the aquatics shared drive 'Transport label'

- A letter of exemption needs to be added to the parcel – this should be completed by the NACWO and sent by the import and export co-ordinator to the sending facility. This document prevents the parcel being x-rayed. It is held on the aquatics shared drive 'Letter of exemption'.
- A customs invoice also needs to be added to the parcel - this should be completed sent by the NACWO and provided to the sending facility. It is held on the aquatics shared drive 'customs invoice template'.
- On the day of transfer UBS staff will box the animals in transport containers, for animals over 30dpf this will be in bags containing sufficient water and oxygen for the journey, label and prepare them for collection. For fry less than 30dpf and eggs, falcon tubes will be used to house the animals, clearly labelled and held within a secondary container. The boxes must be tightly sealed and non-transparent and should contain suitable heat packs to maintain the animals for longer than the expected journey time.
- The receiving establishment will provide confirmation of safe receipt to the import and export coordinator who will inform the NACWO and researcher requesting the animals.

TRANSFER FROM OVERSEAS ESTABLISHMENTS – ALL AGES

Protected Animals may be transferred to the authority of Project Licences held at the University of Cambridge from overseas animal facilities. This can only be done if the following authorities are in place:

1. The Project Licence authorises the movement of animals of that type from outside of the UK.
2. A CEFAS licence is in place for the importation.

PROCEDURE

- A request to transfer animals into the University of Cambridge is made to the Import and Export Coordinator with the NACWO copied in.
- An Animal Transfer Form (Appendix 2) will be provided and should be completed with as much detail as possible.
- The Import and Export Coordinator will contact the supplying establishment to:
 - Request the previous 3 health screens (one of which must be no older than 6 months since conducted) and the screening methodology or that of the individual animals to be transferred. These are then held within the aquatics shared drive by the NACWO.
- If the microbiological health screen is acceptable to the NVS & NACWO the process of transporting the animals can begin.
- The Import and Export coordinator will contact the receiving unit NACWO to:
 - Confirm the date the animals can be received
 - To confirm the requesting researcher is aware of the quarantine process required for the animals and has agreed to this

- The Unit NACWO will then complete the quarantine track sheet on the shared drive with the importation details for future tracking.
- The Import and Export coordinator will contact the supplying establishment to discuss transport dates.
- Import export coordinator will check the CEFAS licence is in date and covers the species.
- Only specialist, UBS approved, and licensed couriers will be used, and a date arranged for the transfer by the imports / exports co-ordinator in liaison with the sending facility, the NACWO and researcher receiving. (Appendix 1).

CEFAS and border control requirements to be provided by the imports and exports co-ordinator and completed by the NACWO for EU and the rest of the world (see further below for JERSEY, GUERNSEY, ISLE OF MAN AND NORTHERN IRELAND):

- The courier chosen must be registered with the Import of products animal's food and feed system (IPAFFS) service (CEFAS). They must update this system to notify the Fish Health Inspectorate and to notify the Animal and Plant Health Agency (APHA) about imports at least one working day before the consignment leaves the source site. They can also make notifications up to 30 calendar days before an import. This notification on IPAFFS will generate a unique notification number (UNN) which the imports and exports co-ordinator will need to provide to the facility sending the animals where it is to be added to the health certificate.
- Consignments must be accompanied by an original health certificate (Model health certificate for the import of ornamental aquatic animals intended for closed ornamental facilities from EU countries or Non-EU countries). The imports and exports co-ordinator to send blank form to the shipping facility, making them aware of the below points regarding the document and the process also. form can be found here for closed aquatics systems: [GBHC060E ACO: Ornamental aquatic for closed ornamental](#) from [EU](#) OR

[GBHC060X ornamental aquatic animals intended for closed ornamental facilities 1251-2008 from non-eu countries v3.1 august-2022.pdf.pdf \(publishing.service.gov.uk\)](#)

o [NOTE from april 2024 the health certificate form will change to this GBHC671 ACO Ornamental aquatic for closed ornamental v1.0 Aug-23.pdf \(publishing.service.gov.uk\)](#)

- o The animal health certificate must be issued by the certifying official (usually the sending named vet at sending facility but check on the exporters government website for who they define as a certified official) not more than 72hrs prior to loading of the consignment and before the consignment leaves the control of the competent authority. For America the USDA also need to endorse the signed and stamped document before it leaves the country.
- o The animal health certificate must bear the unique animal health certificate reference number, signature of the certifying official and the official stamp on every page; the colour of the signature and the colour of the stamp, other than an embossed or watermarked stamp, must be different to the colour of the printed text. The stamp must show the certifying officials name and address.
- o Where the animal health certificate contains multiple or alternative statements, the statements which are not relevant must be crossed out, initialled, and stamped by the certifying official, or completely removed from the animal health certificate; the crossings out, initial and stamps must be different to the colour of the printed text.
- o The health certificate must be a single sheet of paper or a sequence of pages with each page numbered
- o This health certificate must be uploaded to the IPAFFS notification prior to your consignment being exported from the country of origin. To achieve this – the co-ordinator must send the completed form to the courier for loading onto the IPAFFS website.

- A copy of this completed form must be saved onto the import and exports aquatics shared drive by the NACWO.
- The original animal health certificate must accompany the consignment until it reaches the place of destination in Great Britain and be made available for inspection by the competent authority, if and when required.

MOVEMENTS ORIGINATING FROM ANOTHER UNITED KINGDOM TERRITORY OR CROWN DEPENDENCY (JERSEY, GUERNSEY, ISLE OF MAN AND NORTHERN IRELAND)

- Import and export coordinator must notify by email fhi@cefas.co.uk a minimum of 24 hours in advance of all imports of susceptible aquatic animals using form AAH1 (completed in full) - <https://www.gov.uk/government/publications/notification-to-import-live-fish-and-shellfishform-aah1>
- Consignments of fish, molluscs and crustaceans that are susceptible to or vectors for serious (notifiable) diseases (see Annex 3) must be accompanied by a health certificate which meets United Kingdom standards for entry into England and Wales, signed by the competent authority in the country of origin (see above requirements for this document for EU and the rest of the world).
- Import and export coordinator must forward a copy of the signed and stamped health certificate that accompanies the consignment to fhi@cefas.co.uk within 24 hours of arrival in Great Britain. A copy of this must be saved by the NACWO.
- There is no requirement to inform the Fish Health Inspectorate of imports of non-susceptible and vector species for ornamental use.
- A letter of exemption needs to be added to the parcel – this should be completed and sent by the import and export co-ordinator to the sending facility. This document prevents the parcel being x-rayed. It is held on the aquatics shared drive 'Letter of exemption'.

- A customs invoice also needs to be added to the parcel - this should be completed sent by the import and export co-ordinator to the sending facility. It is held on the aquatics shared drive 'customs invoice template'..

ALL OVERSEE'S SHIPMENTS continued :

- A CEFAS Import licence will be provided to the sender prior to the confirmed shipment date by the co-ordinator.
- All documents being sent in the parcel – invoices, health declarations etc must be saved on the aquatics shared drive in the 'import paperwork for shipments outside of the uk' folder.
- Animals will be received into the UBS facility.
- On the day of receipt UBS staff will unpack the animals and check their wellbeing before being placed in home tanks. Any welfare or health issues will be reported immediately to the NACWO and NVS. The import / export track sheet on the shared drive and the quarantine track sheet on the shared drive is updated by the NACWO and the Armis database is updated.
- The receiving unit will provide confirmation of safe receipt or report any issues to the source establishment on arrival and inform the researcher.
- If the microbiological health screen is not acceptable then an alternative solution will be discussed with the research group. This may include sourcing from an alternative establishment, holding animals in a facility of lower health status, using a commercial source, or holding the animals in a quarantine facility for cryopresevation / IVF and re screening. You must ensure the relevant GA Breeding and re derivation protocols are in the Project Licence that will facilitate this.
- If animals are to be held in a quarantine area and / or re screened to confirm the health status, only their eggs will be released from quarantine on receipt of a satisfactory health report. This cost must be met by the research group.
- Animals should not be disturbed, used for scientific procedures or setup for breeding for at least 7 days to allow acclimatisation, post arrival.

- Animals transferred for tissue collection only can be culled on arrival.

HEALTH STATUS REQUIREMENTS

Prior to allowing the import of animals into UBS facilities, the previous 3 health screen reports and the screening methodology must be provided including one report from within the last 6 months, by the supplying establishment and approved by the NACWO and NVS. The NACWO and NVS reserve the right to request more detailed Health Screening information, as needed on a case-by-case basis.

The animal's health status must match or exceed the biosecurity level of the intended UBS facility to be accepted into the destination facility and the health screen report must include the minimum range of organisms as detailed in the FELASA recommendations for monitoring and reporting of laboratory fish diseases and health status, with emphasis on zebrafish.

ACQUIRING ANIMALS

If a health screen of a requested batch of animals is rejected by the NACWO or NVS, they will recommend other methods of acquiring “clean” animals for your research. Or may offer the containment level 2 facility as an option for housing the animals. Please note that animals within CL2 and their embryos can never enter any other fish room, but embryos can be removed from the area following bleach and used within the lab spaces (less than 5dpf). Access to this room is restricted with in depth training required before access is provided.

The most likely course of action (when quarantine alone is not suitable) will involve cryopreservation, screening and IVF of the strain and can usually be carried out either in house. The cost of cryopreservation and IVF and screening varies but a budget allowance of approximately £500 to £1000 per line should be made.

Cryopreservation services are also available should you wish to protect the health status and continuity of valuable lines of GA animals.

REFERENCES

The following documents have been referenced during the compilation of these guidelines.

- [Council Regulation \(EC\) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation \(EC\) No 1255/97 \(legislation.gov.uk\)](#)
- [CEFAS importers and exporters guidance pack version 1.1](#)
- FELASA-AALAS Recommendations for Monitoring and Reporting of Laboratory Fish Diseases and Health Status, with an Emphasis on Zebrafish (Danio Rerio) - <https://pubmed.ncbi.nlm.nih.gov/35513000/#:~:text=The%20recommendations%20emphasize%20the%20importance,risk%20assessment%20when%20exchanging%20fish.>

Appendices

The following appendices and documents are used to facilitate the import and export of animals.

Appendix 1 Due diligence for animal transport across international borders)

Appendix 2 Animal Transfer Form

Appendix 3 list of countries outside of the EU which we can import from



APPENDIX 1

Due diligence for animal transport across international borders

Both the Covid pandemic and the UK exit from Europe pose serious risks for the welfare of animals in transit between countries. For this reason Martin Vinnell wrote to all researchers before Christmas 2020 (see attached) to ask them not to import or export live animals unless it was unavoidable.

Where it is absolutely necessary to move animals it is important we undertake thorough due diligence checks. Below is a list of things the courier company, who undertake to move research animals between countries, should provide you before you agree or sign contracts:

- a) Provide the journey plan which clearly shows each step of the journey, including all flight changes and modes of transport, and how long the full journey is projected to take from the time the animals leave their departure facility to arrival at their destination.
- b) Provide information about which UK airport the animals will arrive into or depart from and who will be responsible for the animals from the point of departure until the animals arrive at their destination..
- c) Written assurance that all animal holding rooms at the arrival, departure and all stops along the journey comply with Home Office Code of Practice: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/388535/CoPanimalsWeb.pdf.
In addition, the courier company should provide information about when animals will be loaded onto flights. For example, if the animals are due to leave an airport early in the morning the courier company should check whether the animals will be loaded onto the aeroplane the night before and if so, the courier company should explain what provision will be made to meet the environmental needs of the animals while they are waiting in the aeroplane for the flight to leave.
- d) Written assurance of the provisions in place for the animals while in transit, e.g. the nature of the transport container, bedding, food and water, biosecurity etc.
- e) Written assurance from the courier company that they have checked that measures are in place to ensure the pilot knows live animals will be in the hold of the aeroplane.
- f) Written assurance that all the necessary paperwork to move the animals is in place so that there are no delays at borders. Ideally copies of this paperwork should be sent to you before animals are moved. Following the UK exit from Europe, it is essential we know this for all movements of animals from EU countries or transiting via EU countries.
- g) If the journey plan shows stop overs these should be considered carefully because flight scheduling is currently being severely affected by the Covid pandemic. For this reason, if there were to be a delay between connecting flights (e.g. due to cancelled flights) or an unexpected delay caused by weather conditions, the courier company should provide reassurance, before the journey commences, that they have

checked that appropriate provisions are in place to ensure the welfare of the animals should a delay occur.

- h) Before the animals leave, the courier company must undertake to contact you and provide information about when animals arrive at and leave airports or border check points, when and where animals are held and who will check and who will be responsible for the animals at each stage of the journey.

January 2021

Appendix 2

UBS Animal Transfer form for movements within the UK

(Including internal transfers) Dec 2023

To be completed by the researcher requesting the transfer (All boxes should be completed).

Name			
Full Address			
Telephone number			
Email address			
PPL & protocol			
Department			
MTA Required [please tick] * Please note – this is the responsibility of the owners of the animals.	Yes	No	Species being transported: Transportation of embryos less than 5dpf upon arrival Yes / No if No please explain below (note zebrafish and medaka can only be imported as embryos from external sources)

Are embryos going to be raised beyond 5dpf? Please specify yes or no	Yes	No	Does housing at receiving facility comply with UK code of practice? Yes/No If no, Please justify:
Do the eggs require bleaching before shipping and who will perform this?			
Recipient Facility (where the eggs are going to be held / raised) <i>if the eggs needs to be delivered to a different location to that of the facility they are being raised, please advise here all destinations:</i>			
Name of recipient			
Full Address			
Telephone number			
Email address			
Grant code to be charged			
PPL & Protocol going to			
Department			

Courier required Yes / No		Provide the details of the person moving the eggs PLUS a second point of contact if not using a courier service <i>(must be less than 5dpf and movement within the UK if not using a courier, must ensure you package as per the import and export pack guidance and cannot use public transport)</i>				
Animal Details, including whether eggs needs to be screened upon arrival (before entering the system) Additional information: e.g. specific experimental or breeding info.						
Gene –	Sex (if known)	Date of birth if known	Room and facility currently housed or parents housed	Armis Stock number	Number being sent	Het / Hom or wild type

BELOW To be completed by the Import/Export Coordinator and aquatics NACWO (All boxes should be ticked)

SECTION A – completed by NACWO for internal transfer or by Coordinator for external transfers

- ☐ Internal transport: Health reports have been checked to confirm the health status is of higher or the same as the receiving facility and the researcher made aware of where the animals will be held upon arrival (quarantine required for lower health status).
- ☐ Transport has been booked and dates/times for collection/drop off confirmed by both sender/receiver.
- ☐ The sending facility has confirmed the transport boxes will have air, heat, oxygen and water to ensure this will cover the whole journey.

Section B to be completed by NACWO

- ☐ The Records of movement are to be recorded on the google drive 'line exported' document.
- ☐ The quarantine track sheet on the aquatics shared drive is updated (if the animals are entering quarantine)
- ☐ If researcher is moving embryos less than 5dpf themselves, a second point of contact has been agreed and details has been provided to NACWO
- ☐ The NACWO will ensure the new stock received is recorded on armis

UBS Animal Transfer form for imports and exports

(outside of the UK) Dec 2023

To be completed by the researcher requesting the transfer (All boxes should be completed).

Sender:			
Name			
Full Address			
Telephone number			
Email address			
PPL & protocol			
Department			
MTA Required [please tick]	Yes	No	Species being transported:
* Please note – this is the responsibility of the owners of the animals.			Transportation of embryos less than 5dpf upon arrival Yes / No if No please explain below (note zebrafish and medaka can only be imported as embryos)
			Does housing at receiving facility comply with UK code of practice? Yes/No If no, Please justify:

Are embryos going to be raised beyond 5dpf? Please specify yes or no	Yes	No	
Please confirm the eggs will be bleached prior to shipping:			
Recipient facility (where the eggs are going to be held / raised) if the eggs needs to be delivered to a different location to that of the facility they are being raised, please advise here all destinations::			
Name of recipient			
Full Address			
Telephone number			
Email address			
Grant code to be charged			
PPL & Protocol			
Department			

**Animal Details, including whether eggs
needs to be screened upon arrival
(before entering the system)**

Additional information: e.g. specific
experimental or breeding info.

Gene –	Sex	Date of Birth	Room and facility currently housed or parent stock housed	Armis stock number or parent stock number	Number being sent	Het / Hom or wild type

BELOW To be completed by the aquatics Import and export coordinator and NACWO (All boxes should be ticked)

SECTION A – Imports and Exports coordinator

- ☐ Health reports have been checked to confirm the health status is of higher than the receiving facility and the researcher made aware of where the animals will be held upon arrival (quarantine required for lower health status).
- ☐ Transport has been booked and dates/times for collection/drop off confirmed by both sender/receiver.
- ☐ The sending facility has confirmed the transport boxes will have air, heat and water to ensure this will cover the whole journey.
- ☐ CEFAS licence is checked and confirmed in date and covers the shipment
- ☐ FHI approved shipment, Health certificate, EXP1 in place and approved.
- ☐ Courier updated IPAFFS

SECTION B – NACWO

- ☐ The Records of movement are to be recorded on the google drive.

- ☐ The quarantine track sheet on the aquatics shared drive is updated (if the animals are entering quarantine)
- ☐ Import and export document saved on the shared drive including health screen, EXP1, health certificate

SECTION C – Imports and exports coordinator

- ☐ The due diligence questions below should be completed by the courier before the animals are sent and kept on file.
- ☐ Provide the journey plan which clearly shows each step of the journey, including all flight changes and modes of transport, and how long the full journey is projected to take from the time the animals leave their departure facility to arrival at their destination.
- ☐ Relevant persons have approved the journey plan.
- ☐ Provide information about which UK airport the animals will arrive into or depart from and who will be responsible for the animals from the point of departure until the animals arrive at their destination.
- ☐ Written assurance that all animal holding rooms at the arrival, departure and all stops along the journey comply with Home Office Code of Practice. In addition, the courier company should provide information about when animals will be loaded onto flights. For example, if the animals are due to leave an airport early in the morning the courier company should check whether the animals will be loaded onto the aeroplane the night before and if so, the courier company should explain what provision will be made to meet the environmental needs of the animals while they are waiting in the aeroplane for the flight to leave.
- ☐ Written assurance of the provisions in place for the animals while in transit, e.g. the nature of the transport container, air and water, biosecurity etc.
- ☐ Written assurance from the courier company that they have checked that measures are in place to ensure the pilot knows live animals will be in the hold of the aeroplane.
- ☐ Written assurance that all the necessary paperwork to move the animals is in place so that there are no delays at borders. Ideally copies of this paperwork should be sent to you before animals are moved. Following the UK exit from Europe, it is essential we know this for all movements of animals from EU countries or transiting via EU countries.

- ☐ If the journey plan shows stop overs these should be considered carefully because flight scheduling is still affected by the Covid pandemic.

For this reason, if there were to be a delay between connecting flights (e.g. due to cancelled flights) or an unexpected delay caused by weather conditions, the courier company should provide reassurance, before the journey commences, that they have checked that appropriate provisions are in place to ensure the welfare of the animals should a delay occur.

- ☐ Before the animals leave, the courier company must undertake to contact you and provide information about when animals arrive at and leave airports or border check points, when and where animals are held and who will check and who will be responsible for the animals at each stage of the journey.

Appendix 3 – Countries outside of the EU which we can import fish from.

- AU Australia
- BR Brazil
- CA Canada
- CL Chile
- CN China
- CO Colombia
- CG Congo
- CK Cook Islands
- HK Hong Kong
- ID Indonesia
- IL Israel
- JM Jamaica
- JP Japan
- KI Kiribati
- LK Sri Lanka
- MH Marshall Islands
- MK* the former Yugoslav Republic of Macedonia
- MY Malaysia
- NR Nauru
- NU Niue
- NZ New Zealand

- PF French Polynesia
- PG PapuaNew Guinea
- PN Pitcairn Islands
- PW Palau
- RU Russia
- SB Solomon Islands
- SG Singapore
- ZA South Africa
- TW Taiwan
- TH Thailand
- TR Turkey
- TK Tokelau
- TO Tonga
- TV Tuvalu
- US United States**
- WF Wallis and Futuna
- WS Samoa
- CH Liechtenstein
- FO Faroe Islands

EU, NO, IS EU Member States and Iceland