



Visiting Researcher Handbook

Paignton Zoo Environmental Park (Paignton, Devon), Living Coasts (Torquay, Devon), Newquay Zoo (Newquay, Cornwall), Slapton Ley National Nature Reserve (South Devon) and Primley and Clennon reserves (Paignton, Devon) are all part of the Whitley Wildlife Conservation Trust (WWCT) family. The WWCT is committed to scientific research to further our knowledge of wildlife, improve the welfare and husbandry of captive animals and enhance conservation strategies for wildlife and habitats. We have a long track record of co-ordinating and supervising excellent research from A level to PhD.

Research Co-ordination

Research within all the WWCT's organisations is co-ordinated by the Field Conservation and Research Department, which has a large staff of qualified and experienced researchers with a variety of expertise:

Head of Research	Dr Amy Plowman	Nutrition, genetics, interpretation
Senior Research Officer	Dr Vicky Melfi	Behavioural husbandry and animal welfare
Zoo Research Officer	Kirsten Pullen	Behavioural ecology and cognition
Assistant Research Officer	Holly Farmer	Animal behaviour and communication
Overseas Conservation Officer	Andrew Bowkett	Conservation and ecology
UK Conservation Officer	Tracey Hamston	Conservation, ecology and environment
WWCT Secretary	Amy Manning	Student co-ordination

In addition, on-site facilitation is provided at Newquay Zoo by Katherine Tofield, at Living Coasts by Clare Davies, in the reserves by Dave Ellacott and for Environmental Management by Martin Brooks.

There are two ways to undertake research at these organisations: by participating in the Trust's Research Programme or through independent research.

All enquiries about undertaking research should be addressed in the first instance to Amy Manning (amy.manning@paigntonzoo.org.uk)

Participation in the Trust's Research Programme

The Field Conservation and Research Department directs and manages a co-ordinated programme of research within all the organisations. Lists of priority projects are produced each spring for HND/FnD/BSc final year dissertation students (to be carried between summer and the following Easter) and each winter for MSc students (to be carried out the following summer). These are distributed to universities and individuals on request.

Procedure

1. Researchers should select their preferred project from the list and contact the above address.
2. The relevant zoo supervisor will then contact the researcher to discuss the project.
3. If the project is agreed the researcher should prepare a brief proposal including:
 - a. Name, academic institution, contact details
 - b. Name and contact details of academic supervisor
 - c. Rationale
 - d. Aims/hypotheses
 - e. Methods
 - f. Approximate dates of data collection in the zoo/reservesThis proposal must be discussed with and approved by the researcher's academic supervisor and the zoo supervisor.
4. Once the proposal is agreed the zoo supervisor and researcher will arrange a mutually convenient start date.
5. On first arriving at the Zoo the researcher will be issued with a badge which will give them access to the zoo/reserves for the purposes of their research. This will specify a period of validity but can be renewed on application if data collection exceeds the original time specified. This badge should be returned on the final visit to the zoo.

Conditions

- Before commencing data collection researchers are required to read and comply with the Health and Safety Guidelines (Appendix A) and complete the Visiting Researcher Information Sheet (Appendix B).
- The zoo supervisor will provide researchers with basic information about the animals/plants being studied and will facilitate the practical requirements of the study.
- The zoo supervisor will provide general academic supervision such as advice on the study design and choice of appropriate statistical analyses. The zoo supervisor will **not** provide detailed tuition on data collection, data entry and statistics.
- Researchers are welcome to use the zoos' library resources but will not be allowed to take items off site. Photocopiers are available for use by researchers for a small charge.
- On completion of their study researchers must provide the Science Department with a full copy of the final report (electronic or hard copy), an electronic copy of their raw data in a clearly understandable format and an electronic copy of a 300 word abstract in the format: rationale, main results, implications (e.g. for welfare, husbandry, conservation), future work.
- The zoo supervisor's permission must be sought before the submission of any papers or presentations of the research and the zoo supervisor must be named as a co-author.
- The Zoo/Trust reserves the right to publish/present the data, in which case the researcher's permission will be sought and he/she will be named as a co-author.

Please send an electronic copy of your final report to your zoo supervisor.

Independent Research

The WWCT and associated organisations welcome independent researchers wishing to conduct research in any discipline compatible with the Trust's aims and ethics.

Procedure

1. The researcher should submit a brief project proposal including:
 - a. Name, academic institution, contact details
 - b. If a student, name and contact details of academic supervisor
 - c. Rationale
 - d. Aims/hypotheses
 - e. Methods, particularly anything that might disrupt normal management routines
 - f. Approximate dates of data collection within the zoo/reserves
2. The proposal will be considered with respect to the Zoos' ethical guidelines on research (Appendix C), the practical implications for staff and the scientific validity of the proposal. Proposals may be accepted, returned with requests for minor modifications or rejected. This decision will usually only take a few days.
3. If the proposal is accepted an appropriate member of staff will be designated as the facilitator and will agree a start date with the researcher
4. On first arrival at the Zoo the researcher will be issued with a badge which will give them access to the zoos/reserves for the purposes of their research. This will specify a period of validity but can be renewed on application if data collection exceeds the original time specified. This badge should be returned on the final visit to the zoo.

Conditions

- Before commencing data collection in the zoos or reserves researchers will be required to read and comply with the Health and Safety Guidelines (Appendix A) and complete the Visiting Researcher Information Sheet (Appendix B).
- The facilitator will provide researchers with basic information about the animals/plants being studied and will facilitate the logistic requirements of the study.
- The facilitator will **not** provide any academic supervision.
- Researchers are welcome to use the zoos' library resources but will not be allowed to take items off site. Photocopiers are available for use by researchers for a small charge.
- Researchers must provide the Science Department with an interim report (1-2 pages) within 3 weeks of completing data collection at the zoos/reserves.
- On completion researchers must provide the Science Department with a full copy of the final report (electronic or hard copy) and an electronic copy of a 300 word abstract in the format: rationale, main results, implications (e.g. for welfare, husbandry, conservation), future work.
- The assistance of the Zoo/Trust must be acknowledged in any resulting publications.
- The researcher retains all rights to the data and authorship of any publications, but the Zoo/Trust reserves the right to publicise the research if appropriate. The researcher's permission will be sought in each case.

Please send an electronic copy of your final report to your zoo supervisor.

Appendix A – Health and Safety Guidelines for Visiting Researchers

Personal health and safety

1. With the exception of stock to which the public have access you should regard all animals in the zoo as dangerous. Do not attempt to pet any animal, do not enter an enclosure with any animal, do not poke fingers (or anything else) through enclosure mesh.
2. Always wash your hands prior to eating if you have been working in and around animals.
3. Do not enter off-show areas of the zoo unless required to do so for your work or with permission from the keeper responsible.
4. Do not wander around the zoo, other than in those areas required for your work, outside of public opening hours.
5. Do not borrow or use any tools without first asking permission and receiving appropriate training.
6. **Make sure you know the escaped animal drill – in brief if you see an escaped animal report it IMMEDIATELY, if you hear three blasts on the klaxon go to the nearest building and remain inside until the all-clear, ensure everyone around you does so also.**
7. In the event of fire ensure human safety first. Livestock and property are secondary and should only be considered if there is no threat to human life. You should be familiar with the fire drill and location of extinguishers in buildings you use regularly.
8. If you are injured in the zoo/reserves inform a responsible person immediately and contact one of the listed First Aiders as soon as possible.

Emergency number for escaped animals, fire and urgent medical attention is 555 during normal office hours. Otherwise dial 9999

Animal health

1. Smoking is not permitted when working with animals or in their food preparation areas.
2. Tell keepers immediately if you see anything in an enclosure which might harm an animal (food wrappings, nails, glass, bottle tops *etc*) or if you think an animal is sick or injured.
3. Do not feed any animal other than by prior agreement with the keeper responsible.
4. Do not put any new enrichment item, food stuff or other item in an animal enclosure or let an animal have access to it until you have received permission from the senior keeper or curator responsible.
5. Do not unlock or open any enclosure doors or gates unless asked to by a keeper.

Visitor safety and public relations

1. Always wear your badge while working in the zoo/reserves.
2. You will be asked many questions by the visitors, always be polite, answer if you can. If you do not know the answer attempt to direct the visitor to someone who does – DO NOT GUESS. This also applies when discussing zoo business with the public outside of the zoo.
3. Be aware that visitors may need help even if they have not asked and offer assistance.
4. Ensure you are familiar with the lost child procedure and always be alert to the possibility of a lone child being lost.
5. If you see visitors feeding animals or climbing over stand-off barriers politely ask them to stop. If they become confrontational do not argue but report the incident to someone in authority.
6. Make sure all gates into off-show areas are closed during public opening hours, always close them even if they were left open before.
7. In the event of fire or an escaped animal ensure nearby visitors know where to go and what to do.
8. Do not talk to any media reporters about zoo matters, other than when asked to do so by the marketing department.

Every time you visit the zoo make sure that you sign in and out in the science department logbook.

Appendix B – Visiting Researcher Information Sheet

Name: _____ Start Date: _____ Anticipated duration: _____

Current home address: _____

Phone no: _____ e-mail: _____
Permanent contact address (e.g. parents): _____

Phone no: _____ e-mail: _____
Contact details whilst in Paignton/Torquay/Newquay (if different): _____

(Student name and contact details will be added to our database. Student names and institution may be given to other zoological databases. Contact details will remain confidential. Permission will be sought before contact details are passed to any third party).

Name and contact details on next of kin in case of emergency: _____

Zoo project title: _____

Academic Institute: _____

Course / Level: _____

Supervisor's name and e-mail address: _____

I have read and agree to comply with the Health and Safety Guidelines _____

I have been advised on and agree to wear appropriate Personal Protection Equipment _____

Before you leave:

I have returned all equipment, keys, books and any other items borrowed

I give permission for the Zoo to keep and share basic details of my research for appropriate scientific reasons

Trust's Research Programme Researchers:

I will provide a full report and raw data on completion. I give permission for the Zoo/Trust to publish/present this research (I will be named as a co-author) as appropriate. If I publish/present this research I will ask the Zoo/Trust's permission (my zoo supervisor will be named as a co-author)

Signed: _____ Date: _____

Independent Researchers:

I will provide an interim report (1-2 pages) within 3 weeks and a full report on completion. I give permission for the Zoo/Trust to publicise this report in appropriate newsletters

Signed: _____ Date: _____

Appendix C – Ethical Policy on Zoo Research

Paignton Zoo at all times acts within the laws of the United Kingdom and abides by all ethical policies of the Federation of Zoological Gardens of Britain and Ireland (the Federation), the European Association of Zoos and Aquaria (EAZA) and the World Association of Zoos and Aquaria (WAZA). These can be read in full at their respective websites: www.zoofederation.org.uk, www.eaza.net, www.waza.org

The Zoo DOES NOT:

- a) Hold a Home Office licence or allow any animal research requiring a Home Office licence i.e. research involving regulated procedures, which are defined as "any experimental or other scientific procedure applied to an [protected] animal which may have the effect of causing that animal pain, suffering, distress or lasting harm" (The Home Office Animals (Scientific Procedures) Act 1986)
- b) Restrain or forcibly separate animals from cage mates solely for the purposes of research, including to take samples such as hair or feathers, except in exceptional circumstances where this would not cause any stress or risk of injury to the animal
- c) Introduce any item or change in husbandry that is likely to cause a reduction in welfare or adverse reaction, such as increased aggression in a group, solely for the purposes of research

The Zoo DOES:

- a) Try to maximise the potential of its animal collection to contribute to the advancement of biological knowledge (within the above constraints)
- b) Undertake and encourage other researchers to undertake non-invasive scientific research aimed at enhancing animal welfare, husbandry and conservation
- c) Review all research proposals carefully to ensure they will not cause pain, suffering, distress or lasting harm to the animals and that they are of an acceptable scientific standard
- d) Ensure that the researcher has adequate prior knowledge and makes efforts to obtain all necessary information from the animals' keepers appropriate for the research.
- e) Take tissue samples during post mortem examinations for the purposes of research
- f) Take samples such as hair, feathers or blood from animals that have been restrained for husbandry or veterinary reasons, provided that taking these samples does not lengthen the time of restraint, increase stress to the animal or necessitate a procedure that would otherwise not be performed e.g. blood is only taken for research if a blood sample was already being taken for a clear and defensible veterinary procedure for the benefit of the animal
- g) Use samples obtained in e) and f) for its own research programme and also provide them on request to *bona fide* researchers elsewhere
- h) Study animals before, during and after potentially stressful events when such events necessarily occur due to husbandry or veterinary requirements
- i) Occasionally train animals to co-operate in research projects. Such training is done in accordance with the Zoo's ethical policy on animal training and potential effects of training on the group are monitored.