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Royal Botanic Garden Edinburgh

Research Ethics Policy

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Introduction and scope

The Royal Botanic Garden Edinburgh (RBGE) is committed to scientific excellence and to the highest standards of ethics in research. It has responsibilities to protect the safety and human rights of all researchers and participants in research projects, and to respect the interests of all stakeholders, including funders, collaborating institutions and wider society.

In addition, the Research Councils UK (2013, revised 2017) require all research organisations to have clear and full policies on ethical standards; clear procedures for research ethics review, communicated effectively to all relevant staff; appropriate procedures for considering and advising on the wider ethical concerns connected to the research or its potential outcomes; and appropriate procedures to obtain and record clearly informed consent from research participants.

This non-contractual policy sets out—broadly—how RBGE will meet required ethical standards in the conduct of research, treatment of participants, and subsequent handling of data. It cannot cover every eventuality; researchers are expected to make ethical judgements dependent on the research context. It conforms to the UK Research Integrity Office's Code of Practice for Research and other applicable guidelines including the Global Code of Conduct for Research in Resource-Poor Settings.

For international and/or collaborative research, the local ethical and legal requirements and guidelines of other organisations and/or countries should also be consulted. Other relevant legislation includes the EU General Data Protection Regulation 2016/679, Data Protection Act 2018,

Freedom of Information Act 2000, Freedom of Information (Scotland) Act 2002, and Equality Act 2010. Where relevant, projects should also comply with the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, and with any national access laws regarding obtaining and utilising genetic resources originating outside the UK.

This policy covers all research projects carried out by or on behalf of RBGE which involve external participants, collection of personal data, and/or where research findings may impact on people, animals, the environment or livelihoods. For the avoidance of doubt, the policy does **not** cover clinical research on humans or direct research on animals, which should both be subjected to additional scrutiny, or piloting of educational programmes. The policy may be adjusted as circumstances dictate.

Statement of Research Ethics

All research carried out by RBGE should meet the following principles:

1. Research should be designed, reviewed, undertaken, and results disseminated, to ensure **integrity, quality, relevance, transparency, legality** and **cultural sensitivity**, both in the UK and in any other countries/regions of activity;
2. Research should be **inclusive** and **accessible**, with efforts made to ensure equal access to the process and results of research by everyone, and with particular regard to the Protected Characteristics of the Equality Act 2010: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation;
3. Research should be designed to protect the **safety, dignity, human rights** and **wellbeing** of participants and their communities, and to avoid damage to the **environment**;
4. The **confidentiality** and/or **anonymity** of information supplied by research participants should be respected, and this clearly explained to participants;
5. **Research participants and researchers should be fully informed** about the purpose, methods and intended possible uses of the research, what their participation entails and what risks and/or benefits, if any, are involved. They should be made aware that their participation is voluntary (even if they are compensated for participation) and that they may withdraw from the project or any part of the project at any time without repercussions. They should also receive **feedback** about the results at the end of the study, unless they indicate a preference not to, and should be made aware of who to contact with any complaint;
6. The **independence** of the research should be clear, and any conflicts of interest or partiality should be explicit.

The responsibility for conducting research in line with these principles rests with the lead investigator. The responsibility for providing appropriate ethics review lies with RBGE and is exercised through the Research Ethics Committee (REC).

Research Ethics Committee

The primary role of the REC is to protect the dignity, rights and welfare of researcher(s) and participants in research studies. It will also consider the consequences of the proposed research for others directly affected or who might benefit from or be impacted by its outcomes in the future. The committee is also responsible for:

- Raising awareness across RBGE of ethical issues in research and ensuring compliance with RBGE policies and procedures;
- Ensuring that appropriate training, information and guidance on ethical issues and associated administrative procedures are made available to researchers;
- Acting as the appropriate competent body to consider and advise on the ethical compliance of research proposals, and to provide feedback to researchers on ethical issues;
- Determining whether a proposal should be subject to further review by an external committee.

Membership of the REC is multi-disciplinary and aims to be gender-balanced. The majority of members will be scientists with knowledge of disciplines related to the projects under review. At least one member will have no affiliation to RBGE, and we will seek to include a volunteer lay member also. RBGE will provide appropriate training for committee members. Committee members will usually serve for three years, with some flexibility to ensure there are always some experienced members. There is no limit on the number of terms a member may serve. The Chair at time of writing is Pete Hollingsworth (Director of Science and Deputy Keeper), and the Deputy Chair and Secretary is Alexandra Davey (Science Policy and Impact Officer). A full list of committee members can be found on Green Pages.

Ethics Review Process

The ethics review process is designed to be not an obstacle, but rather a constructive, supportive and transparent process that adds value to RBGE's research. We encourage researchers to engage with the REC as early as possible during design of their research, and to maintain an ongoing dialogue as the research proceeds, particularly if amendments are made to the project. We also invite feedback on the ethics review process. Please contact ethics@rbge.org.uk with any queries.

Projects that do not involve external participants or collection of personal data of any kind, and have no potential material impact on people, animals, the environment or livelihoods, are **exempt** from an ethics review. The responsibility for deciding whether a project is exempt from review rests with the Principal Investigator (PI); however, researchers are encouraged to make an informal approach to the REC if in doubt.

All projects requiring review should be submitted to the committee by email (ethics@rbge.org.uk) using the Research Ethics Questionnaire found at the end of this document. This should be completed at least two months in advance of work commencing or an application for grant funding being submitted. The Chair or Deputy Chair of the REC will then make an initial assessment as to the level of review required.

If the Chair/Deputy Chair of the REC determines that the project has no significant ethical implications based on the information provided, they may refer it for **Level 1** (fast track) review by two other members of the Committee.

If the Chair/Deputy Chair of the REC considers that the proposal may or does have significant ethical implications, the project will proceed to a **Level 2** (full) review by the whole REC, either in person, virtually via videoconference, or by email.

Level 2 (full) review will be applied to all projects involving:

- Children, young people or vulnerable[1] individuals;
- Collection of personal data[2] from participants;
- Collection of sensitive personal data[3];
- Online data collection from participants outwith RBGE or collaborating institutions;
- Significant disturbance to vulnerable species or habitats, sampling of rare, threatened or harmful taxa, and/or transporting of biological material between countries.

Please note that this is not an exclusive list. Examples of projects that would require Level 2 review may be found in Appendix 2.

A researcher should not start gathering data on any non-exempt project until they have received a favourable opinion in writing from the Chair/Deputy Chair of the REC. If the proposal is recommended to proceed subject to conditions, a researcher should not start their research project until those conditions have been satisfied. Failure to follow the procedure within this policy, including the carrying out of a research project without a necessary ethics review, may result in support for the project being withdrawn and possible further action against the researcher.

Note that ethics review is an indicative but not sufficient process for a research project to be initiated. Staff and research associates should also complete appropriate risk assessments, obtain any required documentation or permits, and abide by other relevant governance policies and procedures such as the RBGE Code of Conduct, Data Protection Policy, Health and Safety Policy and, where applicable, Safeguarding Policy (see Useful links).

Further information on the ethics review process may be found in Appendix 3.

Complaints

If any researcher or institution receives a complaint concerning ethical issues during a research project (e.g., a participant feels they have been misled or in any way mistreated) it should be referred to the REC and to the RBGE Complaints Officer immediately by contacting secretariat@rbge.org.uk, who will record the complaint and advise on an appropriate response and further action if necessary, following the RBGE Complaints Procedure.

Acknowledgements

We gratefully acknowledge guidance received from the James Hutton Institute and the School of Social and Political Science, University of Edinburgh, in the creation of this policy and questionnaire.

[1] Vulnerable individuals are defined as those that may have difficulty providing voluntary, informed consent, or those especially at risk of exploitation, such as those with mental health conditions or disabilities.

[2] Personal data is defined as data relating to a living individual which might enable them directly or indirectly to be identified or which could affirm their physical presence at a locality, and includes names, contact details, medical information, CCTV footage and fingerprints.

[3] Sensitive personal data is a specific set of data that must be treated with extra security, and includes information pertaining to racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic data and biometric data (where processed to uniquely identify someone). Sensitive personal data should be held separately from other personal data.

Appendix 1. Useful links

UK Research Integrity Office (UKRIO) *Code of Practice for Research*: https://ukrio.org/publications/code-of-practice-for-research/

Global Code of Conduct for Research in Resource-Poor Settings: https://www.globalcodeofconduct.org/

UK Department for Innovation, Universities and Skills: *Rigour, Respect, Responsibility: A Universal Ethical Code for Scientists*: https://www.gov.uk/government/publications/universal-ethical-code-for-scientists

US Office for Human Research Protections *International Compilation of Human Research Standards*: https://www.hhs.gov/ohrp/international/compilation-human-research-standards/index.html

Civil Service Government Social Research Unit. 2005. *GSR Professional Guidance: Ethical Assurance for Social Research in Government*: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/515296/ethics_guidance_tcm6-5782.pdf

RBGE Code of Conduct

RBGE Data Protection Policy and Data Protection Impact Assessment

RBGE Health and Safety Policies

RBGE Risk Management Policy

RBGE Safeguarding Policy

RBGE Complaints Procedure

Appendix 2. Example projects that may require Level 2 (full) review

A 'citizen science' project in which volunteers transcribe herbarium label data from digitised specimens online: online data collection, even where identifiable data is not stored, should ensure that participants are able to give informed consent, that there are adequate safeguards against children taking part where appropriate, and that any data storage meets current data protection regulations.

An ethnobotanical study investigating the uses of plants from herbarium labels: any ethnobotanical study may need to take account of the contribution, views and impacts of its potential findings upon the communities using these plants.

A community project exploring the global challenge of food security using participatory methods to co-create resources including 'digital stories': any project involving audio recordings and/or images of participants will require full review.

A project working with young residents to quantify nature and the support systems it provides to their neighbourhoods, along their routes to school: any project involving children or other vulnerable people will require full review.

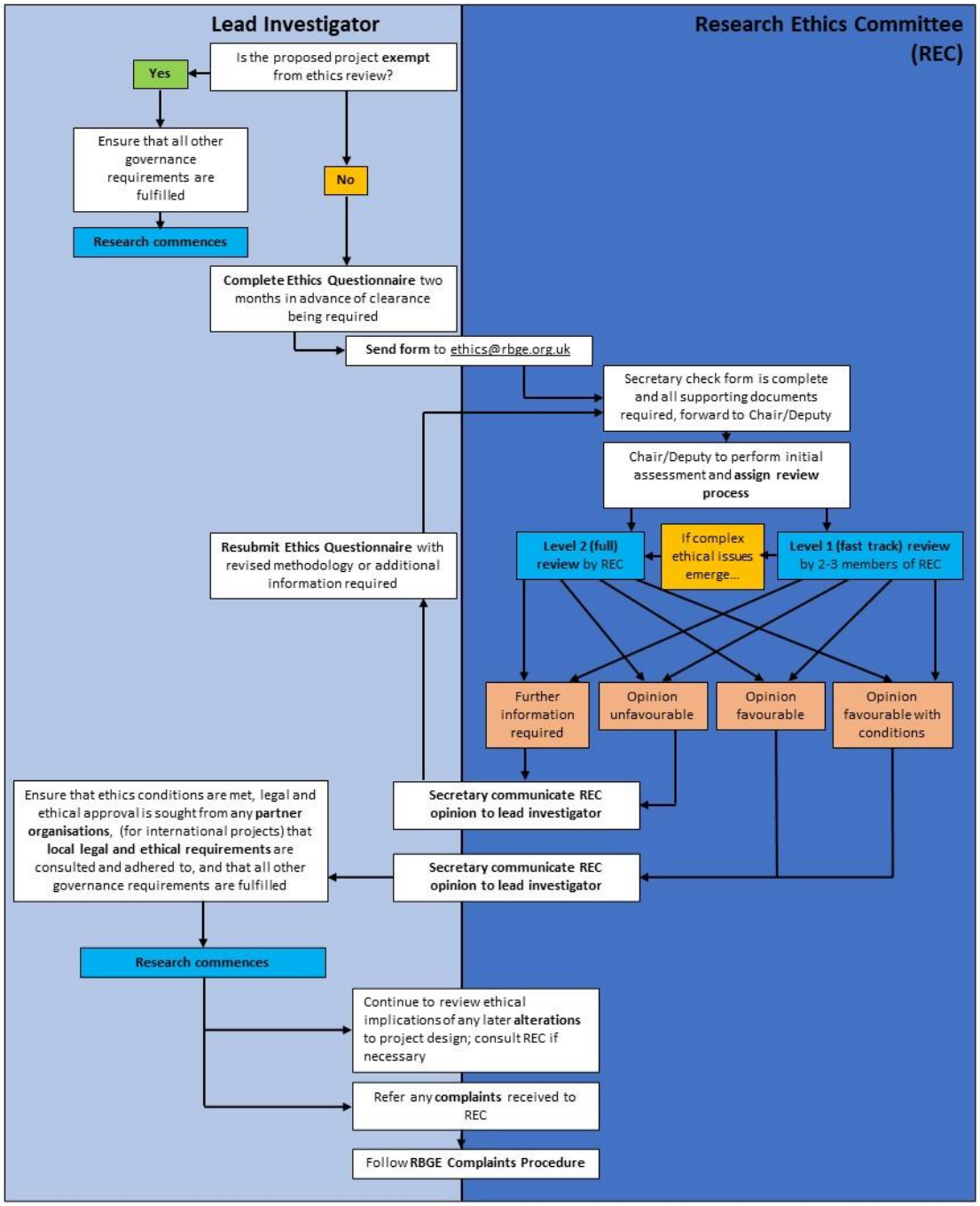
An overseas project exploring the costs and benefits of community-based forest management for livelihoods and biodiversity, generating practical solutions to address current limitations, informing local government policy: this project includes village surveys, training local communities in gender equity, and capacity-building with both villages and government officials. All these aspects require ethics review, in particular because changes to gender equity and capacity building may have positive or negative impacts upon relationships within local communities.

An overseas biodiversity survey employing local people as guides and field assistants: requires review due to the potential risks to the local employees and their communities, including the physical dangers of fieldwork, emotional risks of being away from their families, and potential to cause local upset if pay scales are not locally appropriate.

A study into the illegal and/or unsustainable harvesting of natural resources in a particular area: this requires careful review to mitigate/manage risks to local people due to the potential for identifying those involved in illegal activity, and potential for the research to result in legal or practical changes that may impact upon livelihoods.

A study of how changing land-use impacts on biodiversity: any research for which the results may feed into policy changes, such as the designation of protected areas or change in subsidies for land-use activities, may have significant impacts upon livelihoods in the area studied.

Appendix 3. Research Ethics Review Process



Royal Botanic Garden Edinburgh

Research Ethics Questionnaire

Section 1: Project Details

1.1	Lead researcher name	
1.2	Lead research email	
1.3	Position	
1.4	Supervisor name (if applicable)	
1.5	Proposed project title	
1.6	Brief description of project Please also attach a copy of the full research proposal	
1.7	Proposed funder	
1.8	Funding scheme	
1.9	Does the funder require ethical review?	
1.10	Partner institutions (if applicable)	
1.11	Does the project also require ethical review from partner institution? (if already approved by partner institution, please send a copy of the submission and review to the REC *before completing this form*, who will advise whether RBGE review is also required)	
1.12	How (briefly) will the research results be disseminated?	

1.13	Country/ies where work will take place	
1.14	Does the project comply with legal and ethical requirements of relevant non-UK countries?	
1.15	If applicable, have you read and complied with the Global Code of Conduct for Research in Resource-Poor Settings?	
1.16	Has any member of the Research Ethics Committee already provided guidance on this proposal? (please give name)	
1.17	Date response required	

Section 2: Project Design

2.1	Will any human or animal participants be studied either directly or indirectly?	
2.2	Outline potential benefits to participants	
2.3	Outline potential benefits to non-participants, i.e., wider society	
2.4	Will the true purpose of the research be concealed from any participants? Please give details	
2.5	Will participants be compensated in any way for their involvement? Please give details.	

Section 3: Recruitment of Participants (if applicable)

3.1	How will participants be recruited and what criteria will be used for selection?	
3.2	How will you ensure that participation is accessible to all, regardless of protected characteristics?	
3.3	Will participants include children or young people? Please give details.	

3.4	Will participants include vulnerable4 individuals? Please give details.	
3.5	Will participants' vulnerabilities be difficult to determine (for example, where recruited online)? Please give details.	

Section 4: Care and Protection of Participants and Researchers[5]

4.1	Outline potential risks to participants and researchers taking part in the study, including during dissemination of results.	
4.2	Outline measures that will be taken to mitigate and/or manage the risks identified above.	
4.3	If applicable, outline measures that will be taken to protect children, young people and vulnerable participants.	
4.4	If required, do researchers have clearance through the Protecting Vulnerable Groups (PVG) Scheme?	
4.5	Outline any risks of this research and/or dissemination of results to non-participants or their livelihoods.	
4.6	(For compliance with the Counterterrorism and Security Act 2015) Does your research concern groups which may be construed as 'terrorist' or 'extremist'?	

[4] Vulnerable individuals are defined as those that may have difficulty providing voluntary, informed consent, or those especially at risk of exploitation, such as those with mental health conditions or disabilities.
[5] Note that throughout, "researchers" refers to staff and research associates of RBGE

Section 5: Care and Protection of the Wider Environment

5.1	Will the research be conducted in an environmentally sensitive area, area of Special Scientific Interest, etc., or require crossing such an area?	
5.2	Have appropriate steps been taken to gain permission to access research sites and/or take samples of material? Will you abide by the conditions of any such permits?	
5.3	Will the landowner/responsible agency be informed of your responsibilities to report any evidence of abuse or criminal activity?	
5.4	Will samples be collected and removed in sufficient quantities to have a negative physical or environmental impact on the site, ecosystem, or species present?	
5.5	Will the research significantly disrupt the environment of the site, temporarily or permanently? How will disruption be minimised?	
5.6	Will the research involve sampling rare, threatened, CITES-listed or harmful taxa? How will risks to species and/or researchers be minimised?	
5.7	Will the research involve transporting biological material between countries?	
5.8	Do the research activities or results have any implications with respect to the climate emergency (e.g., air travel)? How will any negative implications be minimised?	
5.9	How will you ensure the fair and equitable sharing of benefits arising from the use of genetic or other resources identified during the research?	
5.10	(for international research) Will there be an in-country co-author on all publications?	
5.11	(if species are to be newly described) Will there be an in-country authority and will taxonomic names be culturally appropriate?	

Section 6: Confidentiality and Data Management (if applicable)

6.1	Will the research involve collection of personal[6] data?	
6.2	Will the research involve collection of personal data via agencies (for example schools, universities, employers or charities) without the participants' direct consent?	
6.3	Does the intended usage of such data adhere to the terms of supply?	
6.4	Will the research involve collection of sensitive[7] personal data (including images of participants)?	
6.5	Will the research involve participants being recorded via audio, video or any other medium? Please give details.	
6.9	Does the research involve sensitive topics (for example participants' sexual behaviour, illegal activities, experience of violence, or mental health)? Please give details.	
6.10	Is there a risk that the research will lead to disclosure of personal, sensitive, or other information? Please give details.	
6.11	Who will have access to the raw personal data and/or sensitive personal data and/or recordings?	
6.12	For how long will raw personal data and/or sensitive personal data and/or recordings be retained, and where will they be stored?	
6.13	Will raw data ever be in the domain of an external provider (e.g. survey server)? Please outline external providers' data storage, security and deletion arrangements.	
6.14	Will the data collected be made available for secondary use (for example via public databases)	
6.15	How will participants' anonymity and/or confidentiality be maintained?	

[6] Personal data is defined as data relating to a living individual which might enable them directly or indirectly to be identified or which could affirm their physical presence at a locality, and includes names, contact details, medical information, CCTV footage and fingerprints.

[7] Sensitive personal data is a specific set of data that must be treated with extra security, and includes information pertaining to racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic data and biometric data (where processed to uniquely identify someone). Sensitive personal data should be held separately from other personal data.

6.16	Is the research compliant with the General Data Protection Regulation (GDPR) and Data Protection Act 2018 (if applicable)?	
6.17	Where relevant, please carry out an RBGE Data Protection Impact Assessment (template available on green pages here) and attach a copy with your application.	

Section 7: Consent (if applicable)

7.1	Will written consent be obtained from participants in the project? Please attach a copy of participant information sheet and consent form, if applicable.	
7.2	Will oral consent be obtained from participants? Please give details.	
7.3	Will consent be obtained from other agencies in lieu of participant consent?	
7.4	If applicable, how will informed consent be obtained from online participants?	
7.5	How will you ensure informed consent from vulnerable participants, or those with whom you do not share a common language?	
7.6	What mechanisms are in place to ensure that participants can withdraw consent, and up until what point in the study? How will participants be informed of these?	
7.7	Where relevant, will research participants be informed about your obligations under the GDPR (2018)?	
7.8	Will participants be informed of your responsibilities to report any evidence of abuse or criminal activity?	
7.9	Does the research risk making unintended findings? How will you deal with these?	
7.10	How will project results be fed back to participants and local communities?	
7.11	Please give details of procedures for participants to feed back and/or register complaints, and for dealing with any complaints received.	

Section 8: Collaborative working (if applicable)

8.1	Is a formal agreement in place between collaborating academic partners?	
8.2	Is a formal agreement in place with any non-academic partner/s?	
8.3	Are formal agreements in place regarding the employment of local field assistants (including guides and translators)? Please give details.	
8.4	Will care be taken to ensure that all individuals/subcontractors involved in the research adhere to the ethical and research integrity standards of RBGE?	
8.5	Have you reached agreements between collaborators relating to intellectual property, publication and authorship?	

Section 9: Conflicts of Interest

9.1	Please declare any potential conflicts of interest (e.g., between researchers, funding bodies, RBGE, or participants)?	