**INSTRUCTIONS**

Before carrying out a procedure in the natural environment, the academic must have a protocol of activity in the natural environment, which allows the planning, anticipation, and structuring of the experimental work, prior to its realization. This protocol must be presented to the Scientific Ethics Committee for the Care of Animals and the Environment (CEC-CAA) so that it can evaluate the ethical-scientific aspects of the procedures and certify that they comply with the current ethical regulations. The construction and integral evaluation of the protocol by the researcher and the committee are achieved through various sections that collect information such as 1) administrative, 2) study site, 3) research context, 4) methods 5) regulatory procedures, 6) research team, 7) environmental impact, 8) mitigation of environmental impact, 9) benefits derived from the study.

**To complete this protocol, use the** **FILLING INSTRUCTIVE**and upload it to the platform in **WORD format** <https://evaluacionetica.uc.cl/>, along with the rest of the required documents.

**COMPLETE THE FOLLOWING CHECKLIST, required for entry to review (click on the box).**

| ⬜ | I have used the **FILLING INSTRUCTIVE** to fill out this protocol form and I know the schedule of the committee sessions. Check [the CEC-CAA website](http://eticayseguridad.uc.cl/comite-etico-cientifico-para-el-cuidado-de-animales-y-ambiente.html). |
| --- | --- |
| ⬜ | I have filled in ALL the blank spaces, modifying the length of spaces as necessary. If any information requested did not apply to my project, I have filled in N/A (Not Applicable) or have written a justification. |
| ⬜ | I have completed the entire document in the same language: Spanish or English. I have written the foundation for the common citizen in Spanish. |
| ⬜ | I understand that once the Committee reviews the protocol and corresponding annexes, comments will be sent to me, to which I must respond with an answer, completing and/or improving the protocol. For this I have followed the instruction stated here:Respond to comments by editing your protocol and highlighting the changes in yellow for a second version. For later revisions, change the color: highlight changes in calypso for the third version and highlight changes in green for the fourth version. Use other colors when there are more reviews. |
| ⬜ | I understand that I must **NOT** fill out this form in the following cases:* Formulation of an SOP (standard operating procedure), or a pilot project: to do this, download the form at this [link](http://eticayseguridad.uc.cl/comite-etico-cientifico-para-el-cuidado-de-animales-y-ambiente/recursos-cec-caa.html), complete it and upload it to the platform.
* If my project has not been awarded. Ethical evaluation is carried out on awarded projects. If you have particular requests in this regard or other administrative questions, you can contact the CEC-CAA CAA coordination [link](http://eticayseguridad.uc.cl/unidad-etica-y-seguridad/quienes-somos.html).
* If my experiments will be carried out completely in the facilities of a University or institute outside the UC that has CICUA. In this case, you MUST send an email explaining your case to the CEC-CAA coordination [link](http://eticayseguridad.uc.cl/unidad-etica-y-seguridad/quienes-somos.html).
 |

**SECTION 1. ADMINISTRATIVE BACKGROUND**

| **Number assigned by the Ethics and Safety Unit.** | XX XXXXXXX | **Sending date 1st versionof the protocol to the Committee:** | XX/XX/XXXX |
| --- | --- | --- | --- |
| **Version , mark with X:** | **1:** |  | **2:** |  | **3:** |  | **4:** |  | **5:** |  | **Another version:** |

| **Project title:** | … |
| --- | --- |
| **Indicate Funding Source(s) and assigned number: (E.g. Regular Fondecyt 11170303)** | … |
| **Indicate if this research is: research unit / undergraduate thesis/doctorate/master's degree/teaching / etc.:** | … |
| **Other participating institutions (example: INACH, industry, other universities):** | … |

| **TYPE OF****MEMBER** | **Name:** | **Role:** Principal investigator, doctoral thesis student, lab manager, technician, etc.)and **Academic Category if applicable** (Instructor, Associate Professor, etc.): | **Institution:** | **e-mail:** |
| --- | --- | --- | --- | --- |
| **Academic Responsible**  |  |  |  |  |
| **Principal investigator** |  |  |  |  |
| **Team member** |  |  |  |  |
| *… Add more rows if required* |  |  |  |  |

**All research must have an Academic Responsible UC**

**SECTION 2. STUDY SITE**

| **2.0.- Justify and indicate the place where the study will be carried out**It is desirable to include a map that allows understanding the environmental context of the place, where protected areas are identified (SENASPE, marine protected areas, private protected areas, etc.)If your project includes vegetation studies, please include land cover maps (for example CONAF registry), forest types and/or land use layer. |
| --- |
|  |

| **2.1 Identify the person in charge or administrative manager of the study site. If you were unable to identify this person, state reasons.** |
| --- |
| **ROLE** | **Name** | **Phone number** |
|  |  |  |
|  |  |  |

| **Indicate why it has not been identified.** |
| --- |
|  |

**SECTION 3. RESEARCH CONTEXT**

| **3.1.- Summary of the project:** indicate the scientific foundation of the project, including the importance or relevance of the study, the benefits that would be obtained from the study for society, and the environment. |
| --- |
|  |

| **3.2.- General objective** |  |
| --- | --- |
| **3.3.- Specific objectives** |  |

*… Add more rows if required*

| **3.4.- Foundation for the Ordinary Citizen**The information provided in this section could be requested by citizens, so a **simple, direct text is required, written in an understandable manner and in good Spanish** (as far as possible avoiding concepts or words in English or too specialized, as well as abbreviations), where the possible benefit of the study is indicated so that it can be understood by ordinary non-specialists. |
| --- |
|  |

**SECTION 4. METHODS**

| **4.1 Flow chart**Include one or more **charts** **that describe the experimental treatments or** (non-experimental**) groups** that are compared as part of the objectives, the number of replicas in each one, and the quantified response variables and that will be the object of subsequent statistical analysis. The chart must specify the temporality of the observations and indicate the sources of dependency between them, when appropriate. |
| --- |
|  |

| **4.2 Experimental or sampling design**Use precise and clear text to **describe the details that complement the chart.** In particular, indicate here a summary of the procedures (in the field or laboratory) that you will use to quantify each of the response variables and factors examined.  |
| --- |
|  |

| **4** .3 **NUMBER OF REPLICAS****JUSTIFY the number of replicas** (experimental subjects) to be used and sample size calculation. You must justify with a bibliography the situations that do not allow you to determine the sample size. |
| --- |
|  |

| **4** .4 **METHODS OF ANALYSIS****Describe the statistical (or other) methods for data analysis.** Describe the methods you will use to examine each of the response variables, according to the design (experimental, observational, pseudo experimental) described in section 3.1. |
| --- |
|  |

| **4** .5 **ACTIVITIES SCHEDULE** |
| --- |
|  |

| **4.6 Details of the species(s) studied or potentially affected by your study, conservation status according to** [**http://www.iucnredlist.org/**](http://www.iucnredlist.org/) **and** [**classification Ministry of the Environment**](https://clasificacionespecies.mma.gob.cl/)**, the amount and frequency of collections.**If your study does not focus on particular species(s), but on community samples whose composition is not predictable, indicate so in the first column and fill in only the aspects associated with the sample in the last two columns. |
| --- |
| **Common and Scientific Name** | **State of conservation** | **Sample characteristics (weight, volume, dimension, others)** | **Frequency and time of year of the collection** |
|  |  |  |  |
|  |  |  |  |

**SECTION 5. REGULATORY PROCEDURES**

| **In case your study includes sentient wild animal species(s) (vertebrates or cephalopods) or potentially affected by your study, you must add the guidelines approved by the Ethics Committee for Animal Care.** |
| --- |

**Indicate if your project requires any of the following approvals (check X in the corresponding box). Attach the corresponding approvals or proof that the project will be evaluated once it is financed.**

| Indicate whether the activities contemplated in your project require or not to carry out an **Environmental Impact Statement or Study**, as stipulated in the *Sistema de Evaluación de Impacto Ambiental* (http://www.sinia.cl/1292/articles -37936\_pdf\_seia\_regulation.pdf).If so, identify the activity, attach the authorization or indicate the status of said process**.**  | **YES** | **NO** |
| --- | --- | --- |
|  |  |
|  |  |
| Indicate if some activities contemplated in your project will be carried out or not within a **State Protected Area**, and therefore require a permit from **CONAF, SUBPESCA, or SERNAPESCA.**If so, identify the activity, attach the authorization or indicate the status of said process.  | **YES** | **NO** |
|  |  |
|  |  |
| Indicate whether or not the activities contemplated in your project require capturing, **monitoring or relocating** individuals of species(s) of native fauna and flora and therefore require permission from the SAG or the pertinent authorities that regulate species(s) in terrestrial, marine and freshwater environments, such as **CONAF, SERNAPESCA or others.** If so, identify the activity, attach the authorization or indicate the status of said process. | YES | NO |
|  |  |
|  |  |

| Indicate if your study will be developed or not in **"Areas of Exploitation and Management of Benthic Resources",** **“Areas with Management Plans”,** **“Marine Genetic Reserve”,** andothers.If so, identify the activity, attach the authorization or indicate the status of said process. | YES | NO |
| --- | --- | --- |
|  |  |
|  |  |

**SECTION 6. RESEARCH TEAM, TASKS AND TRAINING**

**LIST OF PEOPLE WHO WILL PARTICIPATE IN THE PROCEDURES IN A NATURAL ENVIRONMENT**

| **Name:** |  |
| --- | --- |
| **Function and techniques to perform in this protocol:** |  |
| **Experience in fieldwork. Mark with X:** |  | **YES** |  |  **NO** |
| **If you marked "YES", mention who trained them and the years of experience in the functions and techniques to be performed in this protocol:** |  |
| **If you indicated “NO, indicate who will train them in the functions and techniques to be performed in this protocol:** |  |

***Copy and complete this table for each member of the research team associated with this protocol who will handle animals.***

**SECTION 7. POTENTIAL ENVIRONMENTAL IMPACT**

It is understood as **the environmental impact** of a study or research on any action that causes a change in a system (natural or social) in relation to its previous condition. These actions contemplate the phases of implementation, execution, and completion, as well as the activities of the study itself and those necessary for its development (transportation of researchers and teams to work sites, among others).

If applicable, indicate the guidelines or documents you consulted to determine this impact.

| Indicate whether or not your study will be carried out in areas where species with conservation status (Critically Endangered, Endangered, Vulnerable, or Rare) are known to exist and if there is a potential impact on them. | **YES** | **NO** |
| --- | --- | --- |
|  |
| **Summarize** whether ornot the activities to be carried out on the field may affect the current management of the site, population(s), community(ies) or ecosystem(s) under study (e.g., eradication of exotic species, control of fire, implementation of species conservation plans, soil and water management, reforestation, management of biotic or hydrobiological resources, among others). | **YES** | **NO** |
|  |
| Indicate if your study could have effects on the viability of the population(s), species, and ecosystem(s) of the study site (e.g., through alteration of the availability of trophic resources, refuge areas, nesting , foraging, dispersal). | **YES** | **NO** |
|  |
| Indicate whether or not the study impacts species or elements of the landscape, from a perspective of local ecological or socio-ecological knowledge. | **YES** | **NO** |
|  |  |  |
| Indicate whether the transport of researchers and equipment related to the study activities can or will have environmental impacts on elements of the natural environment. If yes, list them below. | **YES** | **NO** |
|  |  |  |
| Indicate if you contemplate removing all the infrastructure and waste associated with the project and its activities at the end of it. | **YES** | **NA** |
| **NO** |
|  |  |  |
| Indicate below how you contemplate avoiding the introduction of seeds, insects or larvae as a result of the study activities. |  |  |
|  |

**SECTION 8. MITIGATION OF ENVIRONMENTAL IMPACTS**

This section is aimed at evaluating the management of risks/impacts with 3 of the principles of the **“4 Ms”** **(MOVE, MODIFY, MINIMIZE).**

| If there are environmental impacts on protected or sensitive areas or species, indicate the criteria or aspects considered by you to not **MOVE** the study from Protected or Sensitive Areas to other areas. |
| --- |
|  |

| Point out the criteria or aspects considered by you to **MINIMIZE** the procedures proposed in the study (e.g., number of samples or replicas, type of sample, the spatial or temporal extension of the sampling) without harming the objectives or the statistical power of the study. |
| --- |
|  |

| If there are impacts on spaces, zones, objects, or species(s) of commercial, social or cultural value, indicate the criteria or aspects considered by you to **MODIFY** the activities to be developed and reduce these impacts without harming the objectives of the study. |
| --- |
|  |

**SECTION 9. BENEFITS DERIVED FROM THE STUDY (4th M).**

| Point out the aspects considered by you to **MAXIMIZE** the use and benefit of the data and results that emanate from your project (e.g., publications, public records, sample repositories, data archive, education of the community that lives or works in or around the area of study, dissemination, teaching, others). |
| --- |
|  |