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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

HJ 710.6-2014

**Technical guidelines for biodiversity monitoring amphibians
(English Translation)**

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Foreword

To implement the "People's Republic of China Environmental Protection Law", "People's Republic of China Wild Animal Protection Law" to regulate Our observations of biological diversity, the development of this standard.

This standard specifies the main content of amphibian diversity of observation, technical requirements and methods.

The Standard Appendix A, B, C, D, E, F, G, H, it is an information appendix.

This standard is the first release.

This standard is developed by the Ministry of Environmental Protection Science, Technology organization.

This standard is mainly drafted by. Environmental Protection Department of the Nanjing Institute of Environmental Sciences, Chengdu Institute of Biology.

This standard MEP October 31, 2014 for approval.

This standard since January 1, 2015 implementation.

The standard explanation by the Ministry of Environmental Protection.

1 Observation techniques guide the amphibian biodiversity

1 Scope

This standard specifies the main content of amphibian diversity of observation, technical requirements and methods.

This standard applies to the observation within the scope of People's Republic of China amphibian diversity.

2 Normative references

This standard refers to the contents of the following documents or the terms. For undated references, the latest edition of to this standard.

GB/T 7714 after bibliographic references packet rules GB/T 8170 repair value expressed about the rules and limit values and judgment HJ 623 regional evaluation standards Biodiversity HJ 628 genetic resources collection technical specification (Trial)

3 Terms and Definitions

The following terms and definitions apply to this standard.

Line transect line transect method Refers to the observer at the observation plots along the selected route within the record information related species occur within a certain range of space method. This method is suitable for a variety of habitats.

Sampling methods quadrat sampling method it refers to the method of observing animals in the entity set quadrats count to see. This method is suitable for a variety of habitats.

Fence pitfall traps drift fences and pitfall trapping method Fences fence pitfall traps and pitfalls from the two parts. Fences can use animals can not climb over or skipped, with some high of plastic tarpaulins, plastic sheeting, tin and other materials to build, set in a straight line or knuckle shape. The inside bottom edge of the fence or (and) Outside the

fence digging buried along one or more trap trap trap trap may be a plastic bucket or metal cans. This method is suitable for Soil matrix habitats and climbing observation weaker species.

Artificial covering law artificial cover method Amphibian habitat in accordance with a certain size, a certain density laid artificial covering, attract amphibians living in hiding during the day in which to hide ranking check the type and quantity of animals. This method is suitable for grasslands, wetlands, thickets, secluded beaches and other natural objects Fewer habitats.

artificial refuge method of artificial shelter law the bamboo (or PVC barrels) bundled fixed in a tree or on the ground to see bamboo species of amphibians in the adult, larvae, tadpoles and eggs. This method is suitable for arboreal frogs are more and less still water habitats southern forests.

Mark recapture method mark-recapture method Within the boundaries of a specific area to capture a certain number of individual animals are marked, labeled after which time back by After over an appropriate period (mark the individual and the individual unlabeled mixed distribution), and then re-capture and calculate its population Methods.

4.1 Scientific Principles

Observation plots and observing the object should be representative, can fully reflect the overall situation of the observation area amphibians; should

2 Science and uniform methods of observation can be observed trends and amphibian populations.

4.2 Operability principles

Observing programs should be considered owned by the human, financial and logistical support and other conditions, the observation plots should have some traffic stripe Members and working conditions. Should be high efficiency, low cost methods of observation.

4.3 principles of sustainability, Observations should meet the needs of biodiversity conservation and management, and the protection and management can play a guiding and warning for use. Observation plots, transects, quadrats, method, time and frequency, once established, should remain long-term fixed and can not change.

4.4 Principle of protection

Selection of wild species, populations are less disruptive methods of observation, to avoid the frequent observation beyond the objective need. To catch National key protected wild animal sampled or mark, must obtain an administrative license of the relevant administrative departments.

4.5 Security Principles

Observation has certain characteristics of field work, the observer should receive professional training, good security measures.

5.1 Observations ready

5.1.1

clear observation purposes. Objective To carry out observations of amphibians amphibian diversity is to understand the status and trends, Ascertain the effect of interfering factors and human activities on amphibians, providing technology for national protection and management of amphibian diversity Surgery support.

5.1.2

Select the observation object. Observation object should be observations of all amphibians in the region, but also for a particular or specific groups Species (endangered species or protected species) to carry out observations.

5.1.3

determine the observation area. Prior to carry out observation, to understand and become familiar observation target biology and distribution, determined the observation area. According to the different species life history characteristics and activity rhythms (such as breeding, migration and wintering, etc.), select two Amphibians important areas of distribution, the typical area, transition area, etc. to carry out observations.

5.1.4

develop observation program. Observation program should include observation scope, methods of observation, contents and index, observation time, Data processing, and other observers.

5.1.5

trained observer. Disaggregated identified as observer, methods of observation and field safety training in the field so that it can accurately Identify amphibians adult, sub-adult, larvae, eggs and tadpoles, master field procedures and safety precautions.

5.1.6

Prepare observation instruments and tools. Including plastic buckets, plastic sheeting, shovels, tile, bamboo (or PVC barrels), wide mouth Bottles, tape measure, calipers, scissors, tweezers, cotton, tissue tube, tissue box, syringes, cameras, global fixed Positioning system (GPS) locator, pH meter, compass, electronic scales, electronic tags, formalin, ethanol, Yi Yao, outside Vulnerary like.