

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

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**Technical guidelines for biodiversity monitoring terrestrial
mammals**

(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 terrestrial mammal observation diversity, technical requirements and methods.

The Standard Appendix A, B, C, D, E, F, G are informative appendix.

This standard is the first release.

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

Drafting of this standard. Nanjing Institute of Environmental Sciences Department of Environmental Protection, Chinese Academy of Sciences and the Institute of Animal

Kunming Institute of Zoology, Academy of Sciences.

This standard MEP October 31, 2014 for approval.

This standard since January 1, 2015 implementation.

The standard explanation by the Ministry of Environmental Protection.

Technical Guidelines for the observation of biological diversity of terrestrial mammals

1 Scope

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

This standard applies to the observation area People's Republic of China Inland mammal 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.

Small mammals, medium sized mammals and large mammals small-sized mammal, medium-sized mammal, large-sized mammal in lagomorphs (eg rabbits Mongolia) prevail, size less than or equal lagomorphs mammal for small mammals Objects, including rodent, hedgehog-shaped head, soricomorpha, Scandentia mesh, Chiroptera, Lagomorpha, part Carnivora, Primates lorisidae Animals; to canids (such as wolves), primates (eg cynomolgus), cloven-hoofed animals (such as musk deer) prevail, larger than the size Lagomorphs, less than or equal to the wolves, monkeys, musk for medium-sized mammals; size greater than wolves, monkeys, musk for large mammal.

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.

Sample sampling point it refers to the site as a center, a radius or a mammal observation area.

Overall count total count method it refers to the observer by the naked eye or binoculars

and other equipment for the entire observation region appearing large, medium-sized mammal individuals Full count method.

Sampling methods quadrat sampling method it refers to the observer at a set quadrats count to see animals entity or activity traces observation method.

Mark recapture method mark-recapture method Refers to an observer within the area of well-defined, captures a certain number of individual animals are marked, and the mark after when back, after an appropriate period (mark the individual and the individual unlabeled mixed distribution), and then re-capture and calculate the number of population methods.

Index estimation indice estimation method Refers to the observer through indirect statistical indicators, and between these indicators based on the number of target animal populations Species richness and population dynamics of the relationship between the method of estimation.

Traces counting trace counting method Refers to the viewer for a number of observations is not easy to capture or mammal, with its legacy of living and easy identification Moving traces speculated mammalian species, estimated numbers of a method of its population.

Dunghill counting dunghill counting method Refers to the observer by counting within a certain range, the number of medium-sized mammals dunghill left its population was estimated A method.

3.10

Infrared camera automatically shoot camera trapping method Refers to the observer using an infrared sensor automatic camera automatically records the images of animals within its sensing range of activities observed method.

3.11

Non-invasive sampling method noninvasive sampling method it refers to the observer without touch or harm mammal itself by collecting their hair off, legacy Feces, urine, food residues or other appendages, etc., to observe, detect individual or sampling of individuals physiological state.

4.1 Scientific Principles

Clear observation objective observation plots and observing the object should be representative, can fully reflect the observation area within a mammal Overall state of biodiversity and communities; should adopt a unified, standardized methods of observation, the mammal population dynamics into Line long-term observations. Methods of observation and observation results should reproducible.

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 based on systematic investigation, take full account of the status quo mammal resources, conservation status and observation target and other factors to select the appropriate observation area and observation objects, high efficiency, low-cost methods of observation.

4.3 Principles of sustainability

Observations should meet the needs of biodiversity conservation and management, and can effectively guide biodiversity conservation and management Management. Observing objects, observation plots, methods of observation, time and frequency, once established, should remain fixed long-term, can not follow Changes meaning.

4.4 Principle of protection

Maximize the use of non-invasive sampling method, to avoid frequent observation unscientific. To capture the national key protected wild animals Sampling or mark must obtain administrative permission of relevant authorities.

4.5 Security Principles

In the capture, processing potential foci of animals, according to relevant provisions of the quarantine process. Observations have some field work Characteristics, the observer should receive professional training, good protective measures.

5.1.1 Determine observation target

To master the observation target species of mammals in the region of composition, distribution and population dynamics, and to evaluate the quality of its habitat;

Or assess the impact of various threats to mammals; or mammal protection measures and analysis of the effectiveness of policies, and proposed adaptive management measures. In determining the observation target should be clear after the observation area.

5.1.2 Identify and understand the observed objects

Select the observation target groups should generally have different ecological requirements and life history of. In considering the observed species diversity at the same time, important considerations.

- a) threatened species of national key protected species and endemic species;
- b) The State protects the beneficial or of important economic or research value species;