



Specifications for Annual Progress Reports on Vital Signs Monitoring Alaska Region, National Park Service

INTRODUCTION

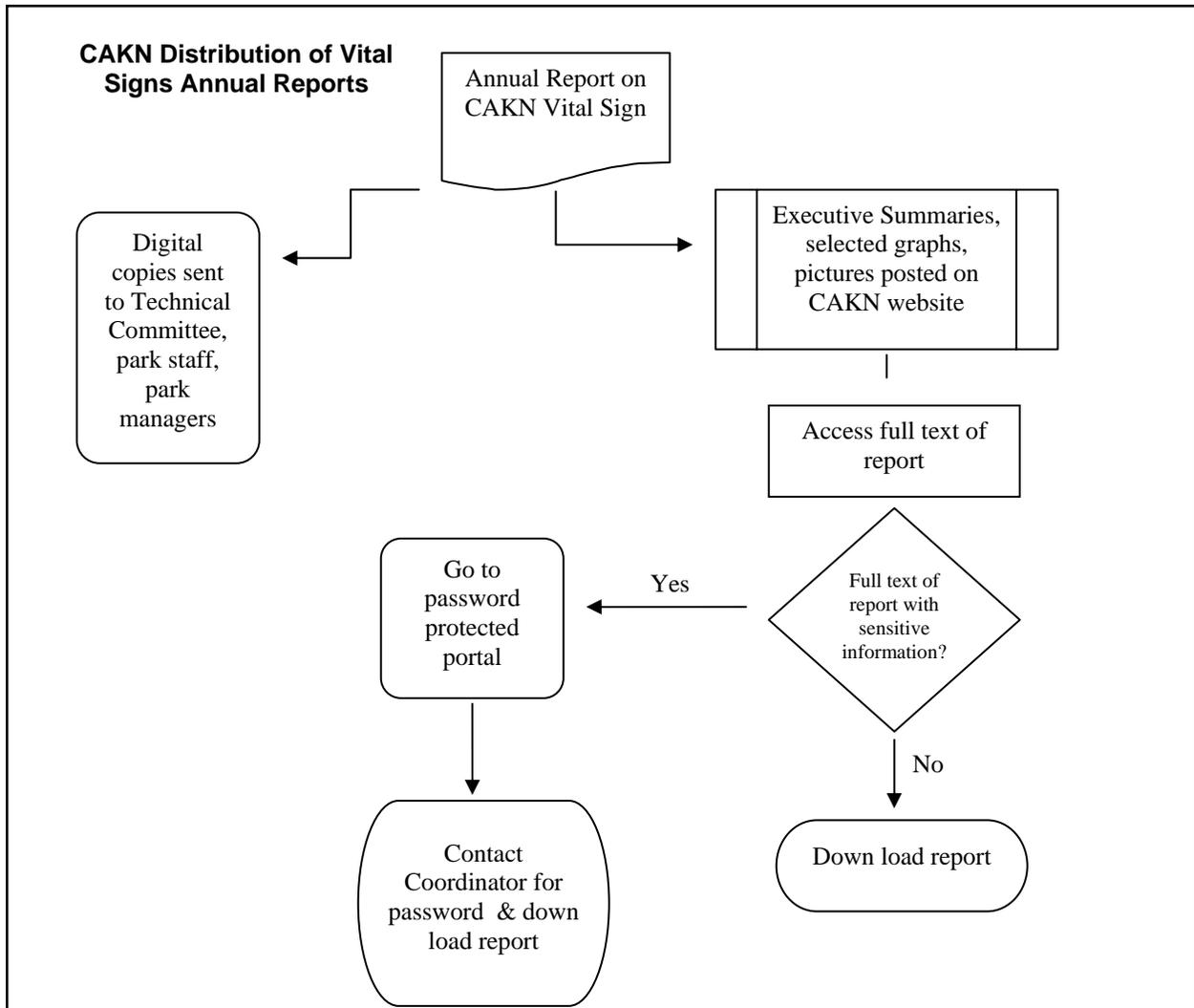
The purpose of Vital Signs Monitoring program is to provide park managers with natural resource information in a timely manner to assist in management decisions. Providing monitoring data to park staff and managers reliably and quickly facilitates the use of monitoring for management of park ecosystems. The purpose of the CAKN Vital Signs Annual Progress Reports is to provide a primary means of communication to park management. The specific goals of these reports are to:

- Describe current condition of resources and provide alert if data are outside bounds of known variation;
- Archive annual data and document monitoring activities;
- Communicate monitoring results within and among network parks;
- Document changes in protocols.

INTENDED AUDIENCES

To make efficient use of the time required to document field efforts and summarize data, the information from the annual reports will be harvested for presentation to several audiences (see diagram below). In addition to circulating the reports via email and print, the Executive Summaries and selected graphs will be posted on the CAKN webpage. Web page browsers will be able to access the full text of the reports from the web page. For reports that contain sensitive information, users will be directed to a password protected area to access the full report. To receive a password to the full reports, users will have to contact the Network Coordinator or Network Data Manager.

Based on the individual vital signs reports, a comprehensive report on all the Vital Signs monitored will be compiled by the Network Coordinator. This report will be 2-3 pages in length and make extensive use of graphics to facilitate information transfer.



The following guidelines will apply to all annual reports produced for the Central Alaska Network Vital Signs Monitoring Program.

TIMING

The goal of the CAKN program is to provide reports on data collected within 6 months of field efforts. Since the majority of the data collected for Vital Signs monitoring is in the summer, the deadline for Annual Reports is March 15 of every year. The deadline for the subsequent Comprehensive Report on all Vital Signs is 1 April of every year. For data collected outside the summer, the annual report is due 6 months after completion of the field effort. However, a short summary of field efforts or plans should be submitted by March 15, in those cases.

REPORT FORMAT

Annual progress reports and final reports should be organized to include the following sections and headings. Additional guidelines on report organization and language can be obtained by reviewing "Suggestions for the composition of technical reports in the natural-resource sciences," Rockwell (1994).

Title Heading (See example at end)

- Vital Sign name/title [use title case and bold], include names of Park(s) where work conducted
- Author(s) [first name, middle initial(s), surname; no professional titles or academic degrees
- Avoid the use of "by"
- Author's Organization Mailing Address
- Year
- Network name and program title
- Funding Source(s) [indicate if network and/or park funding]

List of Acronyms

A list of acronyms should be included if more than 20 acronyms are used the report. All acronyms should be spelled out when initially used in the report.

Executive Summary

Provides the major pieces of information that the body of the report conveys. Essentially should be written to stand alone as a "condensed report." If possible will not exceed 5 bullets containing the following information:

- Parks sampled and the general geographic region (if on grid sampling can report number of grids completed). Approximate timing of sampling and the number of people involved in the effort (e.g. "Sampling was conducted June-July using a field crew of 6 people and 3 volunteers").
- Major findings of efforts (e.g. "Results from water chemistry samples reveal greater than anticipated variation in several parameters [nitrogen and phosphorous]." OR "More peregrine falcons were observed than in the previous 29 years.")
- General interpretation of the results AND/OR
- What has been learned with regard to the protocol for those that are still being developed (e.g. "Our experience indicates that it is not feasible to sample on days we travel to field plots." OR "We cannot reliably sample for dissolved oxygen because we cannot transfer samples out of the field quickly enough.")
- Any substantial changes anticipated for the upcoming field season.

Key Words

- Three to six words from the Project Title that describe the geographic area, common and scientific names of species, and subject of study (inventory, population dynamics, density estimation)

Introduction

- Begin with the standard paragraph (already prepared) that describes the vital sign and why the CAKN is monitoring it
- List the objective(s) of the protocol

Methods and Materials

- Refer to the protocol of the Vital Sign if methodology followed it precisely.
- Notate where methods or materials deviated from the protocol (e.g. "We sampled with a crew of only 2 people due to XXXX constraints, rather than 3 people as the protocol outlines.")
- Gives the location and a description of the study area or monitoring sites
- Describe the analysis as conducted thus far or the development of the analysis, if appropriate. Lists the type and reason for statistical tests that were used and, if applicable, the *P*-value for level of accepted significance.

Results

- Present the of results in the same order as the description of methods
- Place tables/graphs/graphics in proximity to the text
- Acknowledges differences at $P \leq 0.05$ or at an otherwise stated level of significance
- Summarizes contents of each table in one to three statements, followed with the table number in parentheses (readers are not merely referred to tables to fend for themselves)

Discussion (this may be a very short section or combined with Plans for the Coming Year)

- Points out what has been learned thus far from the data and/or the field experience.
- Addresses the objectives
- For protocols that have sections still under development (even if the rest of a protocol has been written) specifically addresses what has been learned and how things will (or won't) be done differently in the future.
- Points out exceptions or lack of relations and defines unsettled points
- Discusses what will be done differently in the next field season
- Overall presents well reasoned thinking crisp, clear sentences and in a logical sequence of paragraphs

[New or continuing projects may not always have tangible results to report. In this case, a section entitled **Progress** may be used in lieu of Results and Discussion heading(s).]

Plans for Coming Year

- Progress Reports must include a section that identifies work planned for the forthcoming year

- This section may also include **Recommendations**, such as suggestions from the authors for improvements in training, logistics, survey schedules, or other information useful to park support staff or investigators conducting similar field work.

Acknowledgments

Literature Cited

Order and Construction of Paragraphs

The paragraphs under each heading or subheading must be in a recognizable order. Common types of order (Hacker 1991) are by chronology or by another scale of time, by space, or by complexity. Whereas the methods and results are best described in chronological order, the components of a discussion may best be given in order of complexity. Logic also frequently dictates the order of paragraphs—notably in introductions (which explain the reasons for a study) and in discussions (which set forth arguments).

Use paragraph headings and subheadings descriptive of the text matter to which they apply and use no more than three categories or levels of importance. First-level headings are in upper-case letters, are left-justified, and may be in bold type. Second-level headings also are left-justified but only the first letter of each word is upper-case. Third-level headings also have the first letter of each word upper-case, but are indented five spaces, underlined or italicized and followed by two hyphens.

For example:

Most important: **FRESHWATER LAKES**
Second most important: Lake Clark
Third most important: *Hardenburg Bay--*

Construction of Tables

A properly constructed and oriented table is reader friendly and eases the comprehension and the comparison of data. Each table must stand independently from the rest of the paper (CBE Style Manual Committee 1983). For this reason, the table must include the location and dates of the study, scientific names of organisms, and other pertinent information. Values must be vertically oriented because comparisons of data are easier down columns than across rows. The units of measure are usually stated in the box heading to avoid clutter in the columns.

Figures

Like tables, figures must stand independently from the rest of the paper (CBE Style Manual Committee 1983), and each figure caption must include the location and dates of study, scientific names of organisms, and other pertinent information. Whether figures are line drawings or photographs, they must be originals and of professional quality. The lettering style in a series of line drawings must be uniform. Hard copies of computer-generated figures must be accompanied by a diskette (or CD) and identification of the software.

Measurement Units--

- All measurement units must be metric.
- Include U.S. equivalent measurements parenthetically.
- Use abbreviated standard units of measure when with a numeral, whereas, units of measure are to be spelled out if no quantity is given (e.g. "10 m" or "...meters").
- Retain only the final unit of measure in a series (e.g. 10 to 15 kg).
- Use a "/" for ratios with numbers (e.g. 10 muskoxen/ha) but use "per" for ratios without numbers (e.g. muskoxen per hectare).

Numbers--

- Numbers from one through nine are written out; numbers above nine are expressed as numerals except when first word of sentence. Ordinal numbers (e.g. second, 23rd) are treated the same.
- Physical measurements (length, width, distance, area, volume, decimals, percentages, degrees, symbols, latitude/longitude, fractions over one) and time (days, years) are always expressed as numerals.

Coordinates--

- Express coordinates as Latitude and Longitude in decimal degrees, followed by the Datum. For example: 58.345678N; 149.123456W, (NAD27)
- Figures that include map products should state the projection and Datum. For example: Alaska Albers Projection on the No. American 1927 Datum

Taxon Names--

- The NPS has adopted ITIS (Integrated Taxonomic Information System) as its standard for taxonomy and nomenclature, and all scientific names should follow that standard. See <http://www.itis.usda.gov/plantproj/itis/index.html>
- Use common species names of plants and animals initially followed with scientific names parenthetically; thereafter, only the common name is necessary.

Computer Software and Page Formatting

The National Park Service has adopted specific word processing, database, and geographic information systems (GIS) software as standards to promote compatibility and sharing of data among parks and promote the development of data management tools to make information more accessible. Microsoft Word is the standard for word processing and all reports and documents must be delivered in MS Word/Excel 97 and HTML electronic format unless otherwise specified. Use Arial 12 pt font and double-space draft final reports and single-space final reports. All linked images and figures must be attached with relative links to the document, for example "\photos\muskox_calf.jpg". Each numbered page should include a header that lists the report title (can be abbreviated), date, and name of the inventory and monitoring network.

Submission Procedure

Submit draft reports in digital format (compressed zip) and hardcopy. Draft reports will undergo a 1-week internal review. Upon submission of the draft final report, the Long-term Monitoring Coordinator will review the manuscript and if warranted (or requested by the author) seek additional management and scientific review comments from appropriate NPS regional and park personnel and peer members of the scientific community. Review comments and recommended changes will then be returned to the author(s) for consideration and preparation of the final report.

Literature Cited

CBE Style Manual Committee. 1983. CBE Style Manual: a guide for authors, editors and publishers in the biological sciences, 5th edition. Council of Biology Editors, Inc., Bethesda, Md. 324 pg.

Hacker, D. 1991. The Bedford handbook for writers. Bedford Books of St. Martin's Press, Boston, MA 689 pg.

Rockwell, E.D. 1994. Suggestions for the composition of technical reports in the natural-resource sciences. National Biological Survey Fish and Wildlife Leaflet 1 9. 34 pg.

EXAMPLE TITLE PAGE OR HEADINGS:

**ANNUAL REPORT ON VITAL SIGNS MONITORING OF DISTRIBUTION AND ABUNDANCE
OF ARCTIC GROUND SQUIRRELS IN WRANGELL-ST. ELIAS NATIONAL PARK &
PRESERVE**

Att A. Boy

**Yukon-Charley Rivers National Preserve
201 First Avenue
Fairbanks, AK 99701**

2005

CENTRAL ALASKA NETWORK

**Funded By: Central Alaska Network and
Wrangell-St. Elias National Park & Preserve**