



# Biological Inventories

**Status:**  
**Complete**

## Introduction

The initial biological inventories—completed in 2000–2005—were among the first tasks completed by the I & M Networks.

The objectives for the biological inventories were to:

1. Document the occurrence of at least 90% of the species of vertebrates and vascular plants that are expected to occur in park units using existing, verifiable data and targeted field investigations;
2. Describe the distribution and relative abundance of species of special concern, such as threatened and endangered species, exotics, and other species of special management interest occurring within park boundaries;
3. Provide the baseline information needed to develop a general monitoring strategy and design that parks can implement once inventories have been completed, tailored to specific park threats and resource issues.

## Background

In Alaska, a unique approach was taken to complete the biological inventories, and the four Networks worked together through the initial planning phases of the inventories. In many cases, these inventories served as the first thorough documentation of species occurrence in park units. Given the large and remote nature of Alaskan park units, a region-wide decision was made to exclude distribution and abundance from the initial effort. To focus limited resources, each Network made difficult decisions about which biological inventories to carry out during the initial implementation. Since then, Networks have continued to inventory additional biological communities and taxa groups as resources become available to do so.

**A technician completes work for a lichen inventory in GAAR. Many of the inventories, including the ARCN lichen inventory, have resulted in new documentations and range extensions.**  
**NPS Photo**

## Access to Inventories

As inventories are completed, lists are certified via subject matter experts before being placed on a certified list in NPSpecies. In addition to the listings in NPSpecies, which is now a tool within IRMA, detailed reports for most inventories may be found on Network websites.

NPSpecies:

<https://irma.nps.gov/App/Species/Search>



Several inventories were made into interpretive guides, including this one on the amphibians of Alaska. Other guides include the Small Mammals of Alaska and the Intertidal Bivalves of Southwest Alaska park units. Guides can be accessed on Network websites.

# Completed Inventories

The table below describes the inventories completed to date by each Alaska I & M Network. Inventories noted in bold were completed as part of the initial, national effort to document species on NPS lands. Others have been prioritized and completed by the Networks since the initial effort. Inventory names are hyperlinked to reports.

<u>Network</u>	<u>Inventory (year)</u>	<u>Notable Findings</u>
All	<b><u>Amphibian (2004)</u></b>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 5 in all units</li> <li>• Range extensions: wood frogs, western toads, rough-skinned newts, and northwestern salamanders</li> <li>• Confirmed presence of amphibians in 10 of 16 park units</li> </ul>
ARCN	<b><u>Montane-nesting shorebirds (2005)</u></b>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 53 in CAKR, 91 in NOAT, 57 in KOVA, 96 in GAAR; 18 to 26% of species in each park are of conservation concern</li> </ul>
ARCN	<b><u>Small Mammals (2006)</u></b>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 5 in GAAR, 5 in KOVA, 3 in CAKR, 2 in BELA</li> <li>• Range extensions for several species</li> </ul>
ARCN	<b><u>Vascular Plants (2006)</u></b>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 46 in BELA, 343 in CAKR, 173 in GAAR, 127 in KOVA, 244 in NOAT</li> <li>• New to Alaska: 2 species</li> <li>• New to North America: 1 species</li> </ul>
ARCN	<u>Lichens (2010)</u>	<ul style="list-style-type: none"> <li>• Documented 491 unique lichen taxa</li> <li>• New to Alaska: 6 taxa</li> <li>• New to North America: 3 taxa</li> </ul>
CAKN	<b><u>Freshwater Fish (2004)</u></b>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 3 in DENA, 6 in WRST, 1 in YUCH</li> </ul>
CAKN	<b><u>Small Mammals (2003)</u></b>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 3 in WRST</li> </ul>
CAKN	<b><u>Vascular Plants (WRST, 2007; DENA, 2004; YUCH, 2004)</u></b>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 217 in WRST, 224 in DENA, 210 in YUCH</li> <li>• New to Alaska: 11 species in WRST, 5 species in DENA</li> <li>• Range extensions: 129 species in WRST, 78 species in DENA, 39 species in YUCH</li> </ul>
CAKN	<b><u>Landbirds (2000)</u></b>	<ul style="list-style-type: none"> <li>• Completed for Yukon-Charley Rivers, 115 species documented</li> </ul>
SWAN	<u>Breeding Birds (2007)</u>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 3 in KATM, 2 in LACL, 7 in ANIA, 3 in ALAG</li> </ul>
SWAN	<b><u>Small Mammals (2005)</u></b>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 3 in KEFJ, 4 in LACL, 1 in KATM</li> <li>• Range extensions: 1 in KATM, 1 in LACL</li> </ul>
SWAN	<b><u>Freshwater Fish (2005)</u></b>	<ul style="list-style-type: none"> <li>• 28 of the 33 expected species were documented in SWAN parks</li> </ul>
SWAN	<u>Marine Invertebrates (soft sediment, 2006)</u>	<ul style="list-style-type: none"> <li>• Katmai has highest diversity; populations in all three parks support higher trophic levels (brown bears, sea otters, diving ducks)</li> </ul>
SWAN	<b><u>Vascular Plants (2005)</u></b>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 557 across all SWAN units</li> <li>• New to Alaska: 1 species</li> <li>• Range extensions: several taxa in all Network park units</li> </ul>
SWAN	<u>Nunatak Plant Communities (2006)</u>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 5 in LACL, 16 in KEFJ</li> <li>• Range extensions: 3 in LACL, 1 in KEFJ</li> </ul>
SEAN	<b><u>Vascular Plants (2004-06)</u></b>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 172 in GLBA, 55 in KLGO, 5 in SITK</li> <li>• Range extensions: 2 species in GLBA, 2 in KLGO</li> </ul>
SEAN	<b><u>Marine and Estuarine Fishes (2003)</u></b>	<ul style="list-style-type: none"> <li>• Total species collected: 100 in GLBA, 31 in WRST, 23 in SITK, 11 in KLGO</li> </ul>
SEAN	<b><u>Waterbird and breeding landbirds (KLGO only, 2004)</u></b>	<ul style="list-style-type: none"> <li>• Previously undocumented species in park unit(s): 21</li> </ul>
SEAN	<u>Bryophytes (SITK, 2005)</u>	<ul style="list-style-type: none"> <li>• 114 species documented</li> </ul>