



Alagnak

Aniakchak

Katmai

Kenai Fjords

Lake Clark

## Brown Bear

*Resource Brief*

### Importance

Brown bears serve important ecological roles as top predators influencing population dynamics of other species and as a means of transferring nutrients from spawning salmon to the terrestrial system. Alagnak Wild River (ALAG), Aniakchak NMP (ANIA), Katmai NPP (KATM), and Lake Clark NPP (LACL) support high numbers of brown bears; densities along the coast of KATM are the highest reported in North America. Brown bears are also an economically important resource for wildlife viewing, sport hunting, and subsistence hunting.



NPS

LACL biotech, Jared Irvine, prepares for data entry prior to brown bear aerial survey.

### Status and Trends

An aerial survey technique developed by statisticians at the Alaska Department of Fish and Game (ADFG) was used to obtain estimates of  $2183 \pm 379$  (SE) brown bears in KATM during 2004-2005 and of  $466 \pm 232$  (SE) brown bears in LACL during 2003-2004. These are the only parkwide abundance estimates of brown bears currently available for SWAN parks.

### Discussion

The impact of large numbers of hunters, anglers and wildlife viewers on coastal brown bear foraging behavior, habitat use, and survival are largely unknown. Coastal sites containing salt marsh vegetation and rivers with salmon are heavily used by bears and humans, creating areas in need of increased management. Future monitoring efforts will focus on evaluating whether ADF&G's aerial survey method can be effectively applied to smaller areas of management concern within SWAN park units. This will allow for sustainable long-term monitoring and informed management of brown bears within these parks.



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Brown bear feeding near the KATM coast.



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Anglers watch a brown bear female with cub walk along Silver Salmon Creek on the LACL coast.

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