



Easy prey: The largest bears in the world use small streams to fatten up on salmon

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CORVALLIS, Ore. – It's a familiar scene to anyone who's watched footage of brown bears catching sockeye salmon in Alaska: They're standing knee-deep in a rushing river, usually near a waterfall, and grabbing passing fish with their paws or jaws.

But a [new study Link is external](#) published in the journal Conservation Letters reveals a different picture of how and when bears eat salmon. Most of these bears, also known as grizzlies, are dipping into small streams to capture their iconic prey.

Using a foraging model based on the Wood River basin in southwest Alaska, a study team led by Oregon State University determined that while small-stream habitats have only about 20% of the available salmon in the watershed, they provide 50% of bear consumption of salmon.

"This tells us that populations of sockeye salmon that spawn in little streams are disproportionately important to bears," said study lead author Jonny Armstrong, an ecologist at Oregon State University. "Bears profit from these small streams because they offer salmon at unique times of the season. To capitalize on plentiful salmon runs, bears need them to be spread across time."



Small streams typically have cold water, which leads to populations of salmon that spawn much earlier in the season when no other populations are available to predators such as bears.

These results have potential consequences for how environmental impact assessments are conducted and evaluated for large projects such as the proposed Pebble Mine in Alaska's Bristol Bay.

These reports typically focus on how the project will affect the abundance of salmon in lakes and rivers, but they usually overlook smaller habitats, Armstrong said.

