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Salish Sea Ecosystem Conference

2018 Salish Sea Ecosystem Conference
(Seattle, Wash.)

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Population, community and food web impacts of hypoxia : a synthesis of findings from Hood Canal

Timothy Essington

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Population, community, and food web impacts of hypoxia: a synthesis of findings from Hood Canal

Tim Essington
School of Aquatic and Fishery Sciences
University of Washington

Collaborators: John Horne, Pamela Moriarty, Julie Keister, Mei Sato, Sandy Parker-Stetter, P. Sean MacDonald, Caroline Paulsen, Aaron Galloway, Halley Froehlich, Anne Beaudreau, Phil Levin

ON THE TRAIL OF BALLARD'S PORCH-CHAIR THIEF BY LARSEN WINTERSTEIN

Seattle Post-Intelligencer

50c

A PUBLISHED EVERY DAY EXCEPT SUNDAY



HEALTH
Child's play:
Eight tips
for making
it count
PAGE 28

BOOKS
**DEFINING OUR
LANDSCAPE**
How a dictionary art book
became a page-turner
PAGE 20 AND 21



FOOTBALL
Huskies
stand tall
after loss
to USC
SPORTS BY
[Name]

MONDAY, OCTOBER 6, 2008

P-1 SPECIAL REPORT

THE SOUND OF BROKEN PROMISES

GRANNY, THIS RESPECTED ELDER in her Northwest ocea pod, has lived from the dawn of the automobile through the advent of the Internet.

In a six-year marine monitoring project, the P-I describes her long life in the troubled waters of Puget Sound.

Over almost a century, the aged matriarch has been raised, shot at, treated by human doctors. Today, Granny and her pod are struggling to survive.



perils continued in her youth — the destruction of their food and habitat, an ever-rising tide of poisons, plastics and sewage, the threat of a nuclear oil spill. Threats loomed large, present and for decades to come the Sound. But most regulations, equity enforcement, political, non-dragging and a surge of new residents have led to little progress. "With the recent adoption of Endangered Species Act protections for orcas and a pending plan to increase the Sound's healthy charge that'll give Granny and her pod continue existing in a sea of broken promises!"



A dead Super-podded one of West Coast's September effects a haunting conclusion by those who have Puget Sound. "Dead ones" are spotted.

NUKE TEST CLAIM BY N. KOREA

Upheaval in Asia's power balance feared

BY JAMES LAMAR
The New York Times

WASHINGTON — North Korea earlier today said it had set off its first nuclear test, warning the region's security is threatened and urging the world community to prohibit it. It has joined the club of nuclear weapons states.

The reported test came just two days after the country was rebuffed by the U.S. Security Council that the nation must end its nuclear weapons program and to open talks with its neighbors, including China and Japan.

The U.S. State Dept. says the test was a 2.2 kiloton, more in size than the atomic bomb that destroyed Hiroshima in 1945. Even smaller, the test would have been a 100 kiloton, the size of the atomic bomb that destroyed Nagasaki in 1945.

Senior State Dept. spokesman Nicholas Burns said the test was a "major escalation" and that the U.S. will immediately take steps to respond.

That's why, says Burns, the U.S. will immediately take steps to respond. He said the test was a "major escalation" and that the U.S. will immediately take steps to respond.

THIS CRISIS



Kim Jong Il, North Korea's leader

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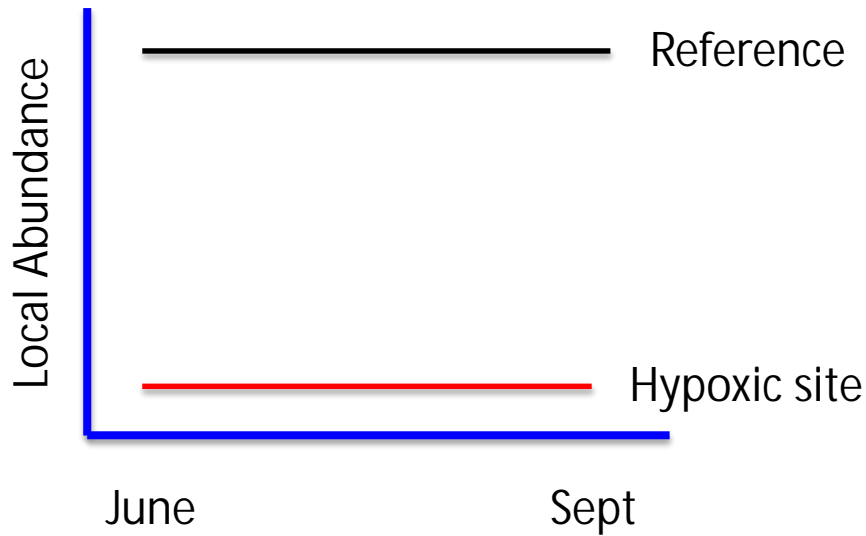
THE SILENT KILLER

Hypertension, even when severe, may not give rise to any symptoms.
The long-term effective control of blood pressure is crucial in reducing the risks of complications of this chronic illness

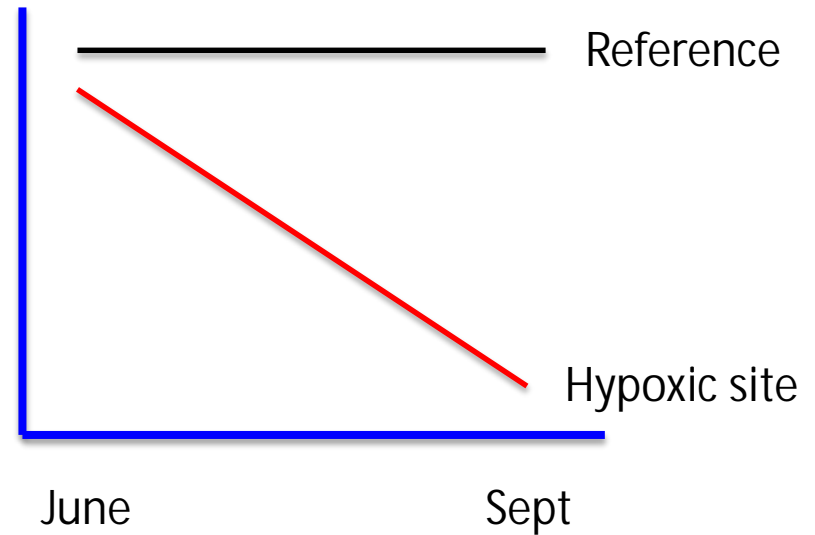
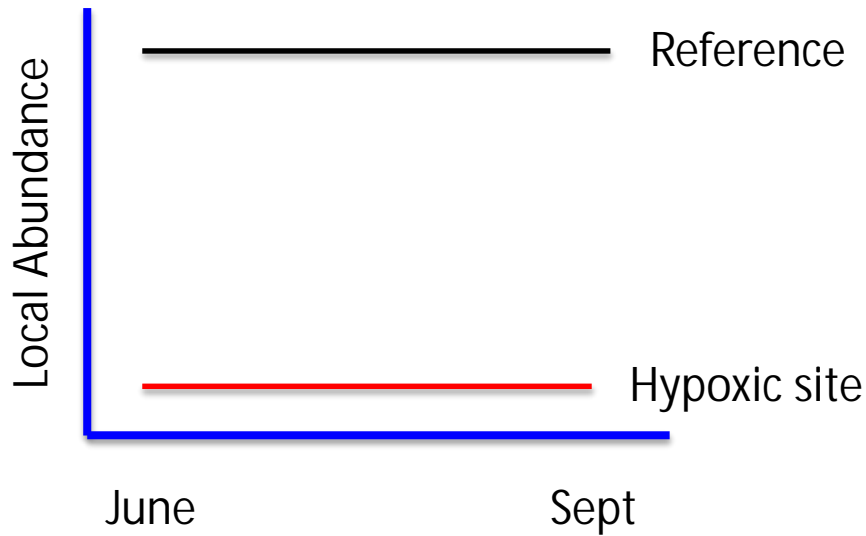




Chronic Effects Dominate For Sessile Invertebrates



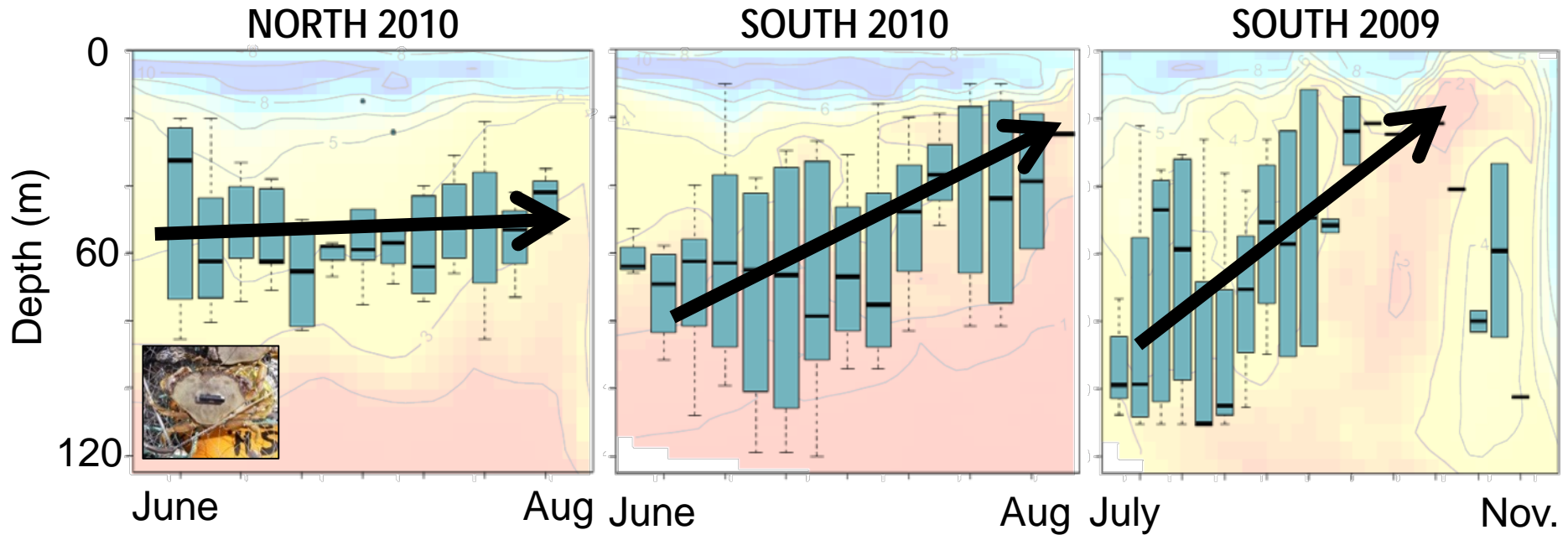
Acute Effects Dominate For Mobile Taxa



... including valuable species



Dungeness Crab shoal to avoid hypoxia



'3-S' Management Strategy

SIZE



SEX



SEASON



Management Strategy may not be robust to hypoxia

Perfect Compliance

Illegal Retention

No Hypoxia



Hypoxia







No change in:
feeding rate
diet composition
local abundance
vertical distribution
prey overlap

Yes change in:
biochemical stress response



No change in:
vertical distribution
Predator overlap

Yes change in:
local density



trophic linkage intensified

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With the recent adoption of Endangered Species Act protections for orcas and a pending plan to insure the Sound finally change that? Or will Granny and her pod continue existing in a sea of broken promises?



A dead Super-podded one of West Coast's humpback whales offers a haunting conclusion to those who have Puget Sound. "Dead ones" are spotted.

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The reported test came just two days after the country was warned by the U.S. Security Council that it would remain on a nuclear weapons watch list unless it gave North Korea's neighbors, including China and Japan.

The U.S. Security Council's warning said it had received a report that North Korea had tested a nuclear device. It said the test was a violation of the 1992 Nuclear Non-Proliferation Treaty and that the U.S. would take steps to isolate the country.

Senior State and Defense officials said the U.S. would take steps to isolate the country.

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Thank you

