U S National Bycatch Report First Edition Update 1

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RYAN MALDONADO

Recommendations for Pooling Annual Bycatch Estimates when Events are Rare John Hunt Publishing

Offers a guide and provides an analysis of how a public European fisheries policy should be evaluated, implemented, and reformed Quo Vadis Common Fisheries Policy? is an essential book that provides an authoritative guide to the future challenges that face the public European fisheries policy. Written by a noted expert with 30 years' experience in fisheries policies, the book provides the information needed to analyze how a public EU policy should be evaluated, implemented, and reformed. The book examines the difficulties of implementing the new policy including the application of the objectives of the 2013 policy reform. The author explores the myriad challenges that face the new policy due to global warming, pollution, and other global drivers. The book compares the new policy with other fisheries policy, particularly with the United States fisheries policy under the Magnusson-Stevens Act. The book offers an opportunity to address and discuss the challenges and obstacles that are not currently in the public domain. This important book: Provides a unique view from a noted expert and former policy insider Offers a critical analysis of a public EU policy from a pro-European standpoint. Gives a foundational resource to aid in the debate on the future of the Common Fisheries Policy Includes topics that go beyond EU's policy and have implications for fisheries' management around the world Written for administrations and stakeholders in the European and international fishing industry, Quo Vadis Common Fisheries Policy? addresses the challenges of EU's new fisheries policy and offers a comparison of the US fisheries policy. The book helps foster much-needed debate about this topic.

Southeast Regional Perspectives on Magnuson-Stevens Act Reauthorization DIANE Publishing

Now a feature-length documentary on the Discovery channel narrated by Tom Brokaw. "Lush, gorgeously written…A profoundly hopeful book." —Tina Rosenberg, winner of the Pulitzer Prize and the National Book Award A Kirkus Best Book of 2016 Many of the men and women doing today's most consequential environmental work—restoring America's grasslands, wildlife, soil, rivers, wetlands, and oceans—would not call themselves environmentalists; they would be too uneasy with the connotations of that word. What drives them is their deep love of the land: the iconic terrain where explorers and cowboys, pioneers and riverboat captains forged the American identity. They feel a moral responsibility to preserve this heritage and natural wealth, to ensure that their families and communities will continue to thrive. Unfolding as a journey down the Mississippi River, Rancher, Farmer, Fisherman tells the stories of five representatives of this stewardship movement: a Montana rancher, a Kansas farmer, a Mississippi riverman, a Louisiana shrimper, and a Gulf fisherman. In exploring their work and family histories and the essential geographies they protect, Rancher, Farmer, Fisherman challenges pervasive and powerful myths about American and environmental values.

Federal Register Oxford University Press

The Ocean Sunfishes: Evolution, Biology and Conservation is the first book to gather into one comprehensive volume our fundamental knowledge of the world-record holding, charismatic ocean behemoths in the family Molidae. From evolution and phylogeny to biotoxins, biomechanics, parasites, husbandry and popular culture, it outlines recent and future research from leading sunfish experts worldwide This synthesis includes diet, foraging behavior, migration and fisheries bycatch and overhauls long-standing and outdated perceptions. This book provides the essential go-to resource for both lay and academic audiences alike and anyone interested in exploring one of the ocean's most elusive and captivating group of fishes.

Quo Vadis Common Fisheries Policy? Frontiers Media SA

"Seabirds are unintentionally caught in commercial fisheries off Alaska; this unintentional catch is referred to as bycatch. Federal law requires bycatch be minimized to the extent practicable, and specific modifications to fishing gear and practices are required by Federal regulation to reduce seabird bycatch. Off Alaska, most seabird bycatch occurs in fisheries using hook-andline (primarily longline) gear. Compliance with seabird avoidance regulations has decreased seabird bycatch by thousands of birds in fisheries using demersal longline gear off Alaska; however, hundreds (often thousands) of seabirds are still taken as bycatch in the fisheries each year. NOAA's National Marine Fisheries Service (NOAA Fisheries) annually updates estimates of seabirds caught as bycatch in commercial groundfish fisheries operating in Federal waters off Alaska. This annual report provides detailed seabird bycatch estimates by gear type for the years 2007 through 2015 and supplements "Seabird Bycatch and Mitigation Efforts in Alaska Fisheries Summary Report: 2007 through 2015" (Eich et al. 2016). This report presents estimates from the gear types hook-and-line (specifically demersal longline), pot, pelagic trawl, and non-pelagic trawl. The estimates provided here do not apply to gillnet, seine, troll, or jig gear"--Introduction. doi:10.7289/V5/TM-F/AKR-13 (http://doi.org/10.7289/V5/TM-F/AKR-13)]

Commerce, Justice, Science, and Related Agencies Appropriations for Fiscal Year 2012 CRC Press

The Texas Landscape Project explores conservation and ecology in Texas by presenting a highly visual and deeply researched view of the widespread changes that have affected the state as its population and economy have boomed and as Texans have worked ever harder to safeguard its bountiful but limited natural resources. Covering the entire state, from Pineywoods bottomlands and Panhandle playas to Hill Country springs and Big Bend canyons, the project examines a host of familiar and not so familiar environmental issues. A companion volume to The Texas Legacy Project, this book tracks specific environmental changes that have occurred in Texas using more than 300 color maps, expertly crafted by cartographer Jonathan Ogren, and over 100 photographs that coalesce to fashion a broad portrait of the modern Texas landscape. The rich data, compiled by author David Todd, are presented in clearly written yet marvelously detailed text that gives historical context and contemporary statistics for environmental trends connected to the land, water, air, energy, and built world of the second-largest and second-most populated state in the nation. An engaging read for any environmentalist or conscientious citizen, The Texas Landscape Project provides a true sense of the grand scope of the Lone Star State and the high stakes of protecting it. To learn more about The Meadows Center for Water and the Environment, sponsors of this book's series, please click here.

22 to 26 January 2008, Loreto, Baja California Sur, México Wolters Kluwer

"This report describes the discard estimation analysis performed for the 2013 Update to the National Bycatch Report. Estimates of discards that occurred during the January to December 2010 period in all federally managed fisheries in the northeast United States were derived for 34 species of finfish and invertebrates using a combined discard-to-kept ratio estimator. Based on this analysis, approximately 64,557 mt (live weight) of discards occurred across the 34 species and 29 fleets considered. The predominant species groups discarded were skates, Atlantic sea scallops and dogfish. The discards reported in this document may not necessarily correspond directly with the discard estimates derived for individual stock assessments due to differences in stratification and data"--Executive summary.

Magnuson-Stevens Fishery Conservation and Management Act and Its Relationship to the National Environmental Policy Act Springer Science & Business Media

U.S. National Bycatch Report

John Wiley & Sons

This book is open access under a CC BY-NC 2.5 license. The Gulf of Mexico is an open and dynamic marine ecosystem rich in natural resources but heavily impacted by human activities, including agricultural, industrial, commercial and coastal development. The Gulf of Mexico has been continuously exposed to petroleum hydrocarbons for millions of years from natural oil and gas seeps on the sea floor, and more recently from oil drilling and production activities located in the water near and far from shore. Major accidental oil spills in the Gulf are infrequent; two of the most significant include the Ixtoc I blowout in the Bay of Campeche in 1979 and the Deepwater Horizon Oil Spill in 2010. Unfortunately, baseline assessments of the status of habitats and biota in the Gulf of Mexico before these spills either were not available, or the data had not been systematically compiled in a way that would help scientists assess the potential short-term and long-term effects of such events. This 2-volume series compiles and summarizes thousands of data sets showing the status of habitats and biota in the Gulf of Mexico before the Deepwater Horizon Oil Spill. Volume 2 covers historical data on commercial and recreational fisheries, with an analysis of marketing trends and drivers; ecology, populations and risks to birds, sea turtles and marine mammals in the Gulf; and diseases and mortalities of fish and other animals that inhabit the Gulf of Mexico.

Southeastern United States Shrimp Trawl Bycatch Program W. W. Norton & Company

"This report describes the discard estimation analysis performed for Greater Atlantic Region (formerly Northeast Region) fish and invertebrates for the National Bycatch Report First Edition Update 2. Estimates of discards that occurred during the 2011, 2012, and 2013 calendar years in all federally managed fisheries in the northeast United States were derived for 34 species of finfish and invertebrates by using a combined discard/kept ratio estimator. Based on this analysis, approximately 63,680 mt (live weight) of discards occurred in 23 fleets in 2011, approximately 61,594 mt (live weight) of discards occurred in 23 fleets in 2012, and approximately 63,603 mt (live weight) of discards occurred in 24 fleets in 2013 across the 34 species considered. In all three years, the predominant species discarded were skates (Rajidae), spiny dogfish (Squalus acanthias), and Atlantic sea scallop (Placopecten magellanicus). The discards reported in this document may not necessarily correspond directly with the discard estimates derived for individual stock assessments because of differences in stratification and data. Hence, the discard estimates presented here are not definitive, but indicative of where discarding is occurring among commercial fisheries and for which species"--Executive Summary. [doi:10.7289/V5BV7DJM (http://dx.doi.org/10.7289/V5BV7DJM)]

Progress, Importance, and Impacts in the United States Texas A&M University Press

"This report describes the discard estimation analysis performed for Greater Atlantic Region fish and invertebrates for the forthcoming National Bycatch Report First Edition Update 3. Estimates of discards that occurred during the 2014 and 2015 calendar years in federally managed fisheries in the northeast United States were derived for 165 individual species and groups of finfish and invertebrates by using a combined discard/kept ratio estimator. Based on this analysis, approximately 101,356 mt (live weight) of discards occurred in 34 fleets in 2014, and approximately 99,542 mt (live weight) of discards occurred in 35 fleets in 2015 across the 165 individual species and groups considered. In both years, the predominant species discarded were (1) skates (Rajidae), (2) benthic species, other, and (3) American lobster (Homarus americanus). Sand dollars (Echinarachnius parma) was the driving species in the "Benthic Species, Other" group, contributing approximately 89% of the group's total discards in 2014 and approximately 88% of the group's total discards in 2015. Of the 2014 and 2015 discards, approximately 60,077 mt and 64,621 mt of discards occurred respectively for the 34 fish and invertebrate species with fishery management plans developed by the Mid-Atlantic Fishery Management Council and the New England Fishery Management Council in the waters off the northeastern United States. The discards reported in this document may not necessarily correspond directly with the discard estimates derived for individual stock assessments because of differences in stratification, data, and estimation methods. Hence, the discard estimates presented here are not definitive but indicative of where discarding is occurring among commercial fisheries and for which species"--Executive Summary.

This Is Hope: Green Vegans and the New Human Ecology Springer

Now with substantial coverage of Ocean Law by new co-author Shi-Ling Hsu, Ocean and Coastal Resources Law, Third Edition, provides an interdisciplinary approach that combines cases and

materials with key sources from science, economics, and business. Ocean and Coastal Resources Law prepares students for practice as lawyers in a variety of fields, such as: conservation and marine protection, coastal land use, real estate, development, and work in state regulatory agencies. New to the Third Edition: New co-author Shi-Ling Hsu and coverage of domestic and international ocean law, protected marine species, and offshore industrial development In-depth treatment of the Deepwater Horizon disaster A holistic view of how activities on the seas affect coastal land activities, and vice versa Updates throughout Coastal Law chapters through 2018 Many new points for discussion Refreshed problem exercises Professors and students will benefit from: New coverage of domestic and international ocean law—richly illustrated, accessibly written, and reflecting the same high level of scholarship as Josh Eagle's Coastal Law chapters Back-to-back organization of Ocean Law and Coastal Law chapters that may be easily adapted to syllabi on Ocean Law, Coastal Law, or Ocean and Coastal Law courses Interdisciplinary materials from law, science, economics, and business that inform and add perspective to a range of subjects—such as conservation, land use, and industry regulation—preparing students for careers as lawyers in a variety of fields Points for discussion that highlight connections between cases and topics, and raise questions that encourage students to articulate a response to issues of law and policy

First Edition Update 3 Cambridge University Press

With species existing in all subpolar seas, king crabs are one of the most valuable seafoods. Major fluctuations in their abundance have stimulated a flurry of research and a rapid expansion of the scientific literature in the last decade. King Crabs of the World: Biology and Fisheries Management consolidates extensive knowledge on the biology, systematics, anatomy, life history, and fisheries of king crabs and presents it in a single volume. This book is the first comprehensive scientific reference devoted to the biology and fisheries of king crabs. The first part of the book describes king crabs and their place in the world, covering geographic distribution, depth and temperature ranges, and maps of known habitats. Chapters examine phylogenetic relationships, evolutionary history and phylogeography, internal and external anatomy of king crabs, and the history of North Pacific fisheries. There is also a chapter that presents a comprehensive overview of diseases and other anomalies of king crabs. The second part of the book describes the life history and biology of various king crab species, including embryonic development and environmental factors, the development and biology of larvae, the ecology and biology of juvenile stages, reproductive strategies of fished species, and the growth and feeding of king crabs and their ecological impacts. The third part of the book discusses human and environmental interactions with king crabs through fisheries, management, and ecosystems. Topics include the impacts of fishing—bycatch, handling, and discard mortality—king crab aquaculture and stock enhancement, and king crabs from various regions such as Southern Hemisphere waters, the Barents Sea, and Alaska. A chapter synthesizing various aspects of king crab biology provides an ecosystem-scale perspective and the final chapter presents the author's outlook on the future of king crab research and populations.

NOAA Fisheries ... Report CRC Press

The technological advances of the last twenty years have brought huge advances in our understanding of the deep sea and of the species inhabiting this elusive and fascinating environment. Synthesising the very latest research and discoveries, this is a comprehensive and much-needed account of deep-sea fishes. Priede examines all aspects of this incredibly diverse group of animals, reviewing almost 3,500 species and covering deep-sea fish evolution, physiology and ecology as well as charting the history of their discovery from the eighteenth century to the present day. Providing a global account of both pelagic and demersal species, the book ultimately considers the effect of the growing deep-sea fishing industry on sustainability. Copiously illustrated with explanations of the deep-sea environment, drawings of fishes and information on how they adapt to the deep, this is an essential resource for biologists, conservationists, fishery managers and anyone interested in marine evolution and natural history.

U.S. National Bycatch Report U.S. National Bycatch Report"The National Bycatch Report provides the first national compilation of bycatch estimates for living marine resources of the United States that are managed by NOAA's National Marine Fisheries Service (NMFS). The NMFS has prepared this report to evaluate the extent to which reliable quantitative bycatch information exists for federally managed commercial fisheries and fisheries with relevant Federal data-collection programs. The report also documents bycatch estimates and bycatch estimation methods for all fisheries for which this information was available in 2005.1 In addition to reviewing the state of bycatch data and estimation, this report establishes a baseline for tracking changes in bycatch over time, and is designed to assist NMFS in meeting legislative mandates for bycatch reduction, guiding policy, and setting priorities"--Executive summary.A Brief Description of the Discard Estimation for the National Bycatch Report"NOAA Fisheries is currently preparing a National Bycatch Report summarizing estimates of discards, by species, which occurred in 2005 in all federally managed fisheries in the United States. This document briefly describes the methods used to estimate the discards of finfish and shellfish in 2005 in fisheries in the Northeast Region, which will be included in the National Bycatch Report. The regional analysis involved 33 species and 77 fleets. Stock components were not considered in the analyses, and only fleets for which discard estimates could actually be derived will be included in the National Bycatch Report. The discard estimation process used a stratification approach broad enough to encompass all species, and employed a combined ratio method using a discard-to-kept weight ratio. The discard estimates derived will not necessarily directly correspond with those contained in individual stock assessments due to differences in stratification and estimation methods. However, the various estimates should be of the same order of magnitude"--Introduction.Managing the Nation's BycatchPrograms, Activities, and Recommendations for the National Marine Fisheries ServiceA Brief Description of Greater Atlantic Region Fish and Invertebrate Discard Estimation for the National Bycatch ReportFirst Edition Update 3"This report describes the discard estimation analysis performed for Greater Atlantic Region fish and invertebrates for the forthcoming National Bycatch Report First Edition Update 3. Estimates of discards that occurred during the 2014 and 2015 calendar years in federally managed fisheries in the northeast United States were derived for 165 individual species and groups of finfish and invertebrates by using a combined discard/kept ratio estimator. Based on this analysis, approximately 101,356 mt (live weight) of discards occurred in 34 fleets in 2014, and approximately 99,542 mt (live weight) of discards occurred in 35 fleets in 2015 across the 165 individual species and groups considered. In both years, the predominant species discarded were (1) skates (Rajidae), (2) benthic species, other, and (3) American lobster (Homarus americanus). Sand dollars (Echinarachnius parma) was the driving species in the "Benthic Species, Other" group, contributing approximately 89% of the group's total discards in 2014 and approximately 88% of the group's total discards in 2015. Of the 2014 and 2015 discards, approximately 60,077 mt and 64,621 mt of discards occurred respectively for the 34 fish and invertebrate species with fishery management plans developed by the Mid-Atlantic Fishery Management Council and the New England Fishery Management Council in the waters off the northeastern United States. The discards reported in this document may not necessarily correspond directly with the discard estimates derived for individual stock assessments because of differences in stratification, data, and estimation methods. Hence, the discard estimates presented here are not definitive but indicative of where discarding is occurring among commercial fisheries and for which species"--Executive Summary.Marine Fisheries ReviewBycatch, a National ConcernLength-weight Relationships for 73 Species and Species Groups as Reported in the 2011-2013 National Bycatch Reports for Pelagic Longline Fisheries in Hawaii and American Samoa"This report provides summaries of length-weight relationships for pelagic species reported in the Hawaii and American Samoa based longline fisheries. NOAA periodically produces a National Bycatch Report (NBR) estimating total weight by species or species group for all species taken by these fisheries. Past reports have utilized both unpublished and published estimates of lengthweight relationships to apply an average weight for an individual of each species to the total number reported in a fishery. The data sources used to generate the length-weight regression coefficients necessary to convert average length of a species (from observer collected length frequency data) have not been well documented. This report provides documentation on the data sources, sample sizes, size ranges, and assumptions used to generate the length-to-weight conversion equations for each species/species group as reported in the NBR report for 2011– 2013 catch estimates. This report does not reflect any new regression analyses, it is an attempt at documentation of where the regression coefficients used in the NBR summaries originated"--Introduction [doi:10.7289/V5CF9N42 (http://dx.doi.org/10.7289/V5CF9N42)]Report to CongressSoutheastern United States Shrimp Trawl Bycatch ProgramAmerican Samoa Longline Fishery Marine Mammal, Seabirds, Sea Turtles, and Fish Bycatch for Years 2014 and 2015The attached Excel workbook (pir.asll.nbr17.xls) includes information requested by the Pacific Islands Fisheries Science Center and Pacific Islands Regional Office for preparation of bycatch estimates for the 2017 update of the National Bycatch Report. This information includes estimates of the total number of bycatch events by the American Samoa Longline (ASLL) fishery in years 2014 and 2015. These estimates are given for all species of seabirds, sea turtles, and fish that have been observed caught (animal is observed hooked or entangled in the longline gear) at least once by the ASLL observer program throughout its history. For marine mammals, estimates of the total number of bycatch events resulting in a Dead or Serious Injury (DSI) classification are given. The workbook includes a worksheet labeled 'key' that provides definitions of the column headings, the items being estimated, and notes of interest. [doi:10.7289/V5/DR-PIFSC-17-027 (https://doi.org/10.7289/V5/DR-PIFSC-17-027)]A Brief Description of Greater Atlantic Region Fish and Invertebrate Discard Estimation for the 2015 Update to the National Bycatch Report"This report describes the discard estimation analysis performed for Greater Atlantic Region (formerly Northeast Region) fish and invertebrates for the National Bycatch Report First Edition Update 2. 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Hence, the discard estimates presented here are not definitive, but indicative of where discarding is occurring among commercial fisheries and for which species"--Executive Summary. [doi:10.7289/V5BV7DJM (http://dx.doi.org/10.7289/V5BV7DJM)]A Brief Description of Northeast Region Fish and Invertebrate Discard Estimation for the 2013 Update to the National Bycatch Report"This report describes the discard estimation analysis performed for the 2013 Update to the National Bycatch Report. Estimates of discards that occurred during the January to December 2010 period in all federally managed fisheries in the northeast United States were derived for 34 species of finfish and invertebrates using a combined discard-to-kept ratio estimator. Based on this analysis, approximately 64,557 mt (live weight) of discards occurred across the 34 species and 29 fleets considered. The predominant species groups discarded were skates, Atlantic sea scallops and dogfish. The discards reported in this document may not necessarily correspond directly with the discard estimates derived for individual stock assessments due to differences in stratification and data"--Executive summary.Southeast Regional Perspectives on Magnuson-Stevens Act ReauthorizationHearing Before the Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard of the Committee on Commerce, Science, and Transportation, United States Senate, One Hundred Thirteenth Congress, First Session, November 14, 2013King Crabs of the WorldBiology and Fisheries Management

"NOAA Fisheries is currently preparing a National Bycatch Report summarizing estimates of discards, by species, which occurred in 2005 in all federally managed fisheries in the United States. This document briefly describes the methods used to estimate the discards of finfish and shellfish in 2005 in fisheries in the Northeast Region, which will be included in the National Bycatch Report. The regional analysis involved 33 species and 77 fleets. Stock components were not considered in the analyses, and only fleets for which discard estimates could actually be derived will be included in the National Bycatch Report. The discard estimation process used a stratification approach broad enough to encompass all species, and employed a combined ratio method using a discard-to-kept weight ratio. The discard estimates derived will not necessarily directly correspond with those contained in individual stock assessments due to differences in stratification and estimation methods. However, the various estimates should be of the same order of magnitude"--Introduction.

Seabird Bycatch Estimates for Alaska Groundfish Fisheries Cambridge University Press

"The National Bycatch Report provides the first national compilation of bycatch estimates for living marine resources of the United States that are managed by NOAA's National Marine Fisheries Service (NMFS). The NMFS has prepared this report to evaluate the extent to which reliable quantitative bycatch information exists for federally managed commercial fisheries and fisheries with relevant Federal data-collection programs. The report also documents bycatch estimates and bycatch estimation methods for all fisheries for which this information was available in 2005.1 In addition to reviewing the state of bycatch data and estimation, this report establishes a baseline for tracking changes in bycatch over time, and is designed to assist NMFS in meeting legislative mandates for bycatch reduction, guiding policy, and setting priorities"--Executive summary.

A Brief Description of Greater Atlantic Region Fish and Invertebrate Discard Estimation

for the 2015 Update to the National Bycatch Report
The attached Excel workbook (pir.asll.nbr17.xls) includes information requested by the Pacific Islands Fisheries Science Center and Pacific Islands Regional Office for preparation of bycatch estimates for the 2017 update of the National Bycatch Report. This information includes estimates of the total number of bycatch events by the American Samoa Longline (ASLL) fishery in years 2014 and 2015. These estimates are given for all species of seabirds, sea turtles, and fish that have been observed caught (animal is observed hooked or entangled in the longline gear) at least once by the ASLL observer program throughout its history. For marine mammals, estimates of the total number of bycatch events resulting in a Dead or Serious Injury (DSI) classification are given. The workbook includes a worksheet labeled 'key' that provides definitions of the column headings, the items being estimated, and notes of interest. [doi:10.7289/V5/DR-PIFSC-17-027 (https://doi.org/10.7289/V5/DR-PIFSC-17-027)]
U.S. West Coast Fisheries for Highly Migratory Species, Fishery Management Plan
Fishery bycatch estimates reported in U.S. marine mammal stock assessment reports (SARs) are typically pooled over multiple years to increase precision and reduce small-sample biases in resulting mean annual estimates. Such pooling can remedy biases in single-year estimates resulting from interannual variability in marine mammal abundance, oceanographic conditions, or observer coverage. Bias is defined as systematic over- or underestimation of true bycatch levels over any particular pooling period. Current SAR guidelines suggests that pooling bycatch estimates for periods of five years is typically adequate to obtain an acceptable level of precision, generally defined as a coefficient of variation (CV) of ≤ 0.30. However, this guidance is based on an assumption that bycatch is a relatively common event with adequate sample sizes and sufficient observer coverage. Pooling over longer periods is also acceptable if additional years accurately represent the current state of the fisheries and their inclusion reduces estimation error. For rare events, estimation error can be severe, with problems that include 1) an inability to document bycatch that is occurring because observer coverage is too low to detect rare events (negative bias) and 2) exaggerated estimates of annual bycatch when observer coverage is low and observed bycatch events are extrapolated by a large multiplicative factor (positive bias). Rare bycatch events often involve species that pose management concerns because their abundance and potential biological removal (PBR) levels are low to begin with. As such, it is important to reduce estimation error for these species. We report the results of a simulation trial for rare bycatch events in a hypothetical fishery with 20% observer coverage, showing how estimation error is reduced as a function of the number of years that annual estimates are pooled beyond the 5-year time period most typically used in marine mammal stock assessments.
Environmental Impact Statement
The seafood processing industry produces a large amount of by-products that usually consist of bioactive materials such as proteins, enzymes, fatty acids, and biopolymers. These by-products are often underutilized or wasted, even though they have been shown to have biotechnological, nutritional, pharmaceutical, and biomedical applications. For example, by-products derived from crustaceans and algae have been successfully applied in place of collagen and gelatin in food, cosmetics, drug delivery, and tissue engineering. Divided into four parts and consisting of twenty-seven chapters, this book discusses seafood by-product development, isolation, and characterization, and demonstrates the importance of seafood by-products for the pharmaceutical, nutraceutical, and biomedical industries.
Deep-Sea Fishes
"This report provides summaries of length-weight relationships for pelagic species reported in the Hawaii and American Samoa based longline fisheries. NOAA periodically produces a National Bycatch Report (NBR) estimating total weight by species or species group for all species taken by these fisheries. Past reports have utilized both unpublished and published estimates of lengthweight relationships to apply an average weight for an individual of each species to the total number reported in a fishery. The data sources used to generate the length-weight regression coefficients necessary to convert average length of a species (from observer collected length frequency data) have not been well documented. This report provides documentation on the data sources, sample sizes, size ranges, and assumptions used to generate the length-to-weight conversion equations for each species/species group as reported in the NBR report for 2011– 2013 catch estimates. This report does not reflect any new regression analyses, it is an attempt at documentation of where the regression coefficients used in the NBR summaries originated"--Introduction [doi:10.7289/V5CF9N42 (http://dx.doi.org/10.7289/V5CF9N42)]
Nature and People
This is Hope compares the outcomes of two human ecologies; one is tragic, the other is full of promise. As Will explains in his Introduction, ‘Our human ecology is the expression of everything we do and is represented by every interaction we have on earth…it consists of the multitude of relationships we have with other people, other species, and our physical environment’. He describes our current human ecology in depth to illustrate how we are living inappropriately, cruelly, and unsustainably. This is obsolete and has been for a long time; it is the cause of our overpopulation, our overconsumption of resources, the poverty of ecosystems and people, and our disregard for the rights of individuals from other species. This is Hope proposes a new human ecology to replace it.