NOAA Technical Memorandum NMFS-AFSC-157

An Atlas on the Distribution and Habitat of Common Fishes in Shallow Nearshore Waters of Southeastern Alaska

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Alaska Fisheries Science Center

September 2005

NOAA Technical Memorandum NMFS

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This document should be cited as follows:

> Johnson, S. W., A. Darcie Neff, and J. F. Thedinga. 2005. An atlas on the distribution and habitat of common fishes in shallow nearshore waters of southeastern Alaska. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-157, 89 p.

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September 2005

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ABSTRACT

Distribution and habitat use are presented on the 50 most abundant fish species captured in shallow nearshore waters (< 20 m offshore and < 5 m deep relative to mean lower low water (MLLW) of southeastern Alaska. Fish were captured with a beach seine at 41 locations from 1998 to 2004. At each location, habitats sampled included sand or gravel beaches with no attached vegetation, cobble beaches with understory kelps (e.g., *Laminaria saccharina*), soft bottom (sand, silt, or mud) beaches with eelgrass (*Zostera marina*), and steep bedrock outcrops. A total of 538 seine hauls yielded 448,166 fish. Based on total catch, the three most abundant species were walleye pollock (*Theragra chalcogramma*), Pacific sand lance (*Ammodytes hexapterus*), and Pacific herring (*Clupea pallasii*). Mean catch per seine haul was greatest in eelgrass for 30 of the 50 most abundant species. Juveniles dominated the catch of all species captured. For example, mean size of walleye pollock, Pacific sand lance, and Pacific herring was less than 100 mm fork length. Distribution patterns were evident for many fish species; some are widely distributed throughout southeastern Alaska (crescent gunnel, *Pholis laeta*), whereas others are confined to southern waters (kelp perch, *Brachyistius frenatus*) or more outside coastal waters (black rockfish, *Sebastes melanops*). Shallow nearshore waters support a diverse and abundant community of fishes, many of commercial importance. Information on distribution and habitat of nearshore fish assemblages will help resource managers identify and protect coastal areas at risk to human disturbance.

CONTENTS

INTRODUCTION

The Magnuson-Stevens Fishery Conservation and Management Act of 1996 requires the identification of essential fish habitat (EFH) for species included in federal fishery management plans (FMPs) (Minello 1999). Identifying EFH requires basic information on fish distribution and habitat use. In southeastern Alaska, some information exists upon which to infer general distribution for species included in the Gulf of Alaska FMP (North Pacific Fishery Management Council 2002). For many FMP species in Alaska, however, such information is limited, especially for early life stages. In particular, resource managers need information on fish use of shallow nearshore (< 20 m offshore and < 5 m deep) habitats to protect areas critical to fisheries.

Southeastern Alaska has about 33,600 km of tidal shoreline (Department of Interior 1994) and a wide diversity of estuarine and marine habitats including fiords, bays, channels, and straits. Nearshore areas of intertidal and subtidal vegetation are considered habitat areas of particular concern because of their high value as fish habitat and vulnerability to human disturbance (North Pacific Fishery Management Council 2002). Two types of submerged vegetation, eelgrass (*Zostera marina*) and kelps (e.g., *Laminaria saccharina*) are widely distributed in lower intertidal and shallow subtidal areas along the coast of Alaska (McRoy 1968, Phillips and Watson 1984, O'Clair and Lindstrom 2000, Wyllie-Echeverria and Ackerman 2003). Other common habitat types in Alaska include non-vegetated substrates of sand or gravel and steep bedrock outcrops. Little information is available on fish use of these habitat types.

Nearshore habitats with and without submerged vegetation provide food resources, cover, and nursery habitat for many marine species important in sport and commercial fisheries (Gotceitas et al. 1997, Norcross et al. 1999, Dean et al. 2000, Spalding et al. 2003). Of the few

studies done in Alaska, important commercial species found in eelgrass or kelp have included Pacific herring (*Clupea pallasii*), juvenile Pacific cod (*Gadus macrocephalus*), juvenile rockfish (*Sebastes* spp.), and juvenile salmon (*Oncorhynchus* spp.) (Laur and Haldorson 1996, Dean et al. 2000, Murphy et al. 2000, Byerly 2001, Johnson et al. 2003).

This atlas describes the distribution and habitat use of the 50 most abundant fishes captured in shallow nearshore waters of southeastern Alaska from 1998 to 2004. Fish were sampled with a beach seine at 41 locations; a variety of habitat types (e.g., kelp, eelgrass) were sampled at each location. Many of the species captured are included in an FMP for Alaska, whereas others are important from an ecosystem perspective (e.g., food source for marine mammals, sea birds, and other fishes). Information on distribution and habitat of nearshore fish assemblages will help resource managers identify important fisheries habitat and protect it from human disturbance.

MATERIALS AND METHODS

Although catch data were compiled from a suite of studies with different objectives in southeastern Alaska (Murphy et al. 2000, Johnson et al. 2003, Harris et al. In prep., Johnson and Thedinga In prep., Thedinga et al. In prep.), methods of fish capture were similar. Fish assemblages were sampled at 41 general locations from 1998 to 2004 (Fig. 1). At each location, between 1 and 22 sites were sampled with a beach seine and at least one seine haul was made at each site (Table 1); a total of 279 unique sites were sampled. Sites were selected based on habitat type determined by visual observation of the dominant substrate present and the presence or absence of attached vegetation. Sites also had to be approachable by skiff and free of obstructions

(e.g., large boulders). At some locations (e.g., Benjamin Island, Eagle Beach, Ushk Bay, The Brothers Islands, and Klawock Inlet), the same sites were sampled more than once in the same year or in different years (Table 1). All sampling occurred within 2 hours of low tide (range +1.0 to −1.5 m below mean lower low water, MLLW). A complete description of the beach seine and the methods of setting it are provided in Johnson et al. (2003). A geographic position was obtained in the middle of each seine site with a hand-held global positioning system (GPS). Most (> 62%) sampling effort was in June, July, and August (Fig. 2).

Habitats sampled included sand or gravel beaches with no attached vegetation (bare), cobble beaches with understory kelps, soft bottoms with eelgrass, and steep bedrock outcrops (Table 1). Sand or gravel beaches with no attached vegetation were generally "pocket beaches" found inside protected bays. Most kelp sites were more oceanic and located in exposed locations at the mouths of bays. Understory kelp occupies subtidal areas to depths of about −30 m. Understory kelps often grow as dense, low-lying mats on rocky substrates. Kelp habitats sampled were dominated by *L. saccharina*, a brown kelp that has a smooth blade up to 3.5 m long and 18 cm wide (O'Clair and Lindstrom 2000). Other kelps commonly found with *L. saccharina* were *Cymathere triplicata* and two or more species of *Alaria*. Most eelgrass sites were located inside protected bays and inlets with freshwater influence. Relative to MLLW, eelgrass occupies areas of the lower intertidal and subtidal zones from +1 m to −6 m. Eelgrass usually grows in soft substrates of sand, silt, or mud. Bedrock outcrops were usually steep and located in exposed locations on the outside of bays; *Laminaria* and *Alaria* were usually attached to bedrock faces. Of the 279 unique sites sampled, 35 were bare, 67 were kelp, 92 were eelgrass, and 85 were bedrock (Table 1).

Captured fish were identified to species and enumerated. The number of fish in large catches was estimated gravimetrically. To achieve this, a presumably random subsample of approximately 500 fish was removed from the total catch and the remainder of fish were collectively weighed to the nearest 0.1 kg. Fish in the subsample were weighed to the nearest gram and counted by species. A mean weight of fish determined from the subsample was used to estimate the number of fish in the total catch. The proportion of each species in the subsample was also used to determine the species composition of the total catch. Fork length (FL) was measured to the nearest millimeter for up to 50 individuals of most species. Fish were anesthetized in a mixture of 1 part carbonated water to 2 parts seawater for identification and measurement.

DATA ANALYSIS

A distribution map is presented for each of the 50 most abundant species captured. On each map, a summary is included on total catch, overall occurrence (number of seine hauls each species was captured divided by the total number of seine hauls (all years, n = 538), mean fork length ± 1 standard deviation and the total number measured, life stage (i.e., juveniles, adults), and whether the species is included in an FMP. Additionally, a graph is presented on each map displaying mean catch per seine haul and percent occurrence by habitat type. Catch data was standardized to mean catch per seine haul by dividing the total catch of each species in each habitat type by the respective number of seine hauls in each habitat type–scale on the ordinate varies depending on catch totals. Percent occurrence by habitat type was determined by dividing

the number of seine hauls in each habitat type that each species was captured by the total number of seine hauls (all habitat types) in which that species was captured.

RESULTS

Total Catch

A total of 538 seine hauls yielded 448,164 fish (Table 1) comprising 79 species. The 50 most abundant species captured are listed in Table 2; these 50 species comprised 99% of the total catch. Twenty-one of the 50 most abundant species are included in an FMP for Alaska (Table 2).

Most Abundant Species

Based on total catch, the 10 most abundant species were walleye pollock (*Theragra chalcogramma*), Pacific sand lance (*Ammodytes hexapterus*), Pacific herring, chum salmon (*O. keta)*, pink salmon (*O. gorbuscha*), shiner perch (*Cymatogaster aggregata*), Pacific sandfish (*Trichodon trichodon*), threespine stickleback (*Gasterosteus aculeatus*), crescent gunnel (*Pholis laeta*), and Pacific cod. Of the 10 most abundant species, some were captured infrequently but often in large numbers (e.g., walleye pollock; 14% of all seine hauls, 122,792 total fish), whereas others were captured frequently but usually in small numbers (e.g., crescent gunnel; 61% of all seine hauls, 6,975 total fish).

Habitat Use

Of the 50 most abundant species, mean catch per seine haul was greatest in eelgrass sites for 30 species, at bare sites for 9 species, at kelp sites for 7 species, and at bedrock sites for 4 species (Fig. 3). Most species were captured in more than one habitat type. For example, of the 143 seine hauls where pink salmon were captured, 38% were in eelgrass, 22% in bedrock, 21% in kelp, and 19% at sites with no vegetation. Total catch by habitat type for the 50 most abundant species was 176,336 fish in eelgrass, 127,007 fish in kelp, 118,114 fish in bedrock outcrops, and 22,622 fish at sites with no vegetation. Some of the most abundant species in eelgrass were Pacific sand lance and chum salmon, whereas some of the most abundant species at sites with no vegetation or with kelp or bedrock were walleye pollock and Pacific herring.

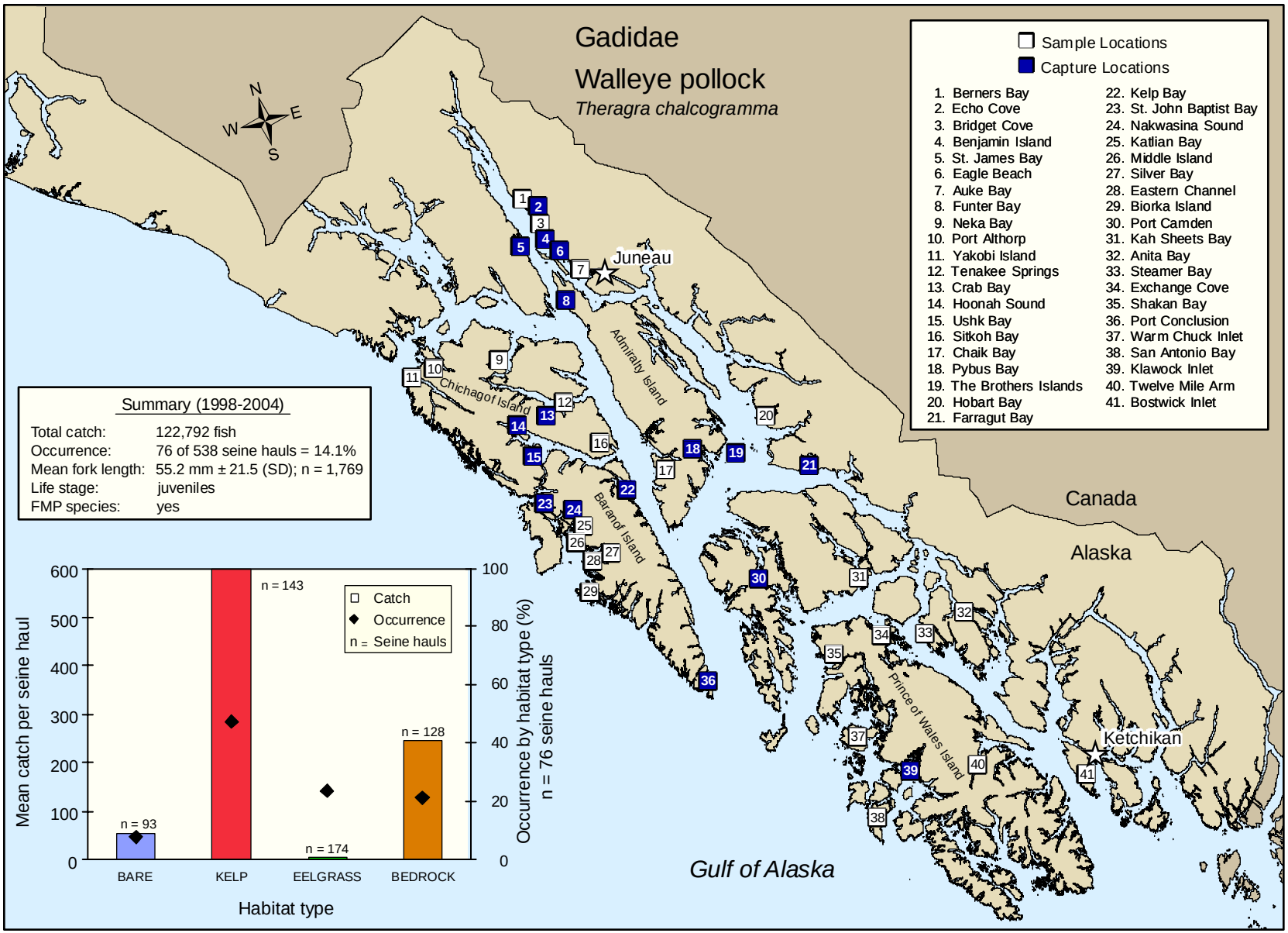
Life Stage

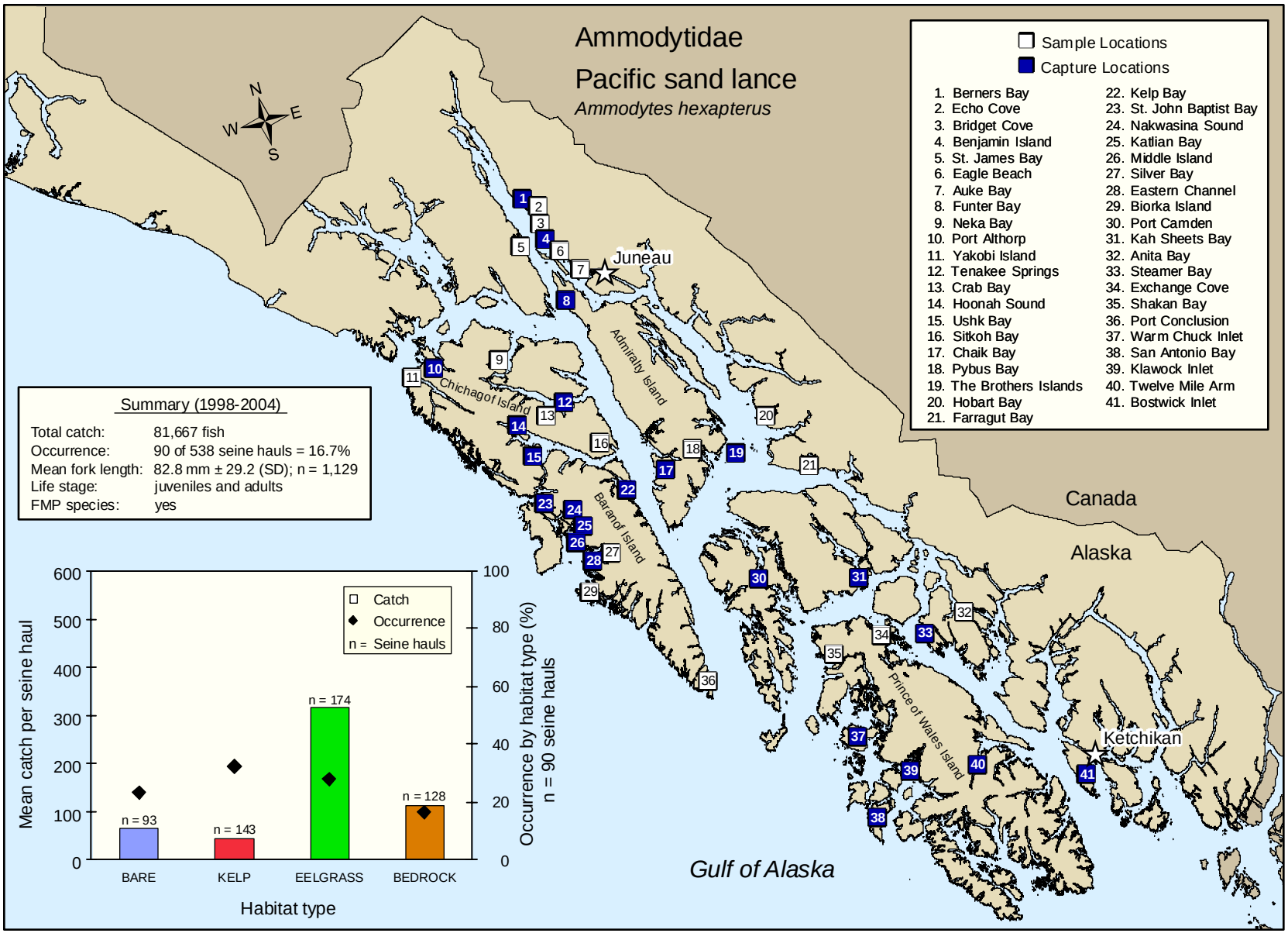
Juveniles dominated the catch of all species captured. For example, mean size of walleye pollock, Pacific herring, Pacific sand lance, Pacific cod, Pacific sandfish, chum salmon, pink salmon, and coho salmon (*O. kisutch*) was less than 100 mm FL. Species for which both juveniles and adults were captured included shiner perch, crescent gunnel, and snake prickleback (*Lumpenus sagitta*). The largest (mean FL > 200 mm) species captured were Pacific staghorn sculpin (*Leptocottus armatus*), whitespotted greenling (*Hexagrammos stelleri*), starry flounder (*Platichthys stellatus*), painted greenling (*Oxylebius pictus*), and cutthroat trout (*Oncorhynchus clarkii*).

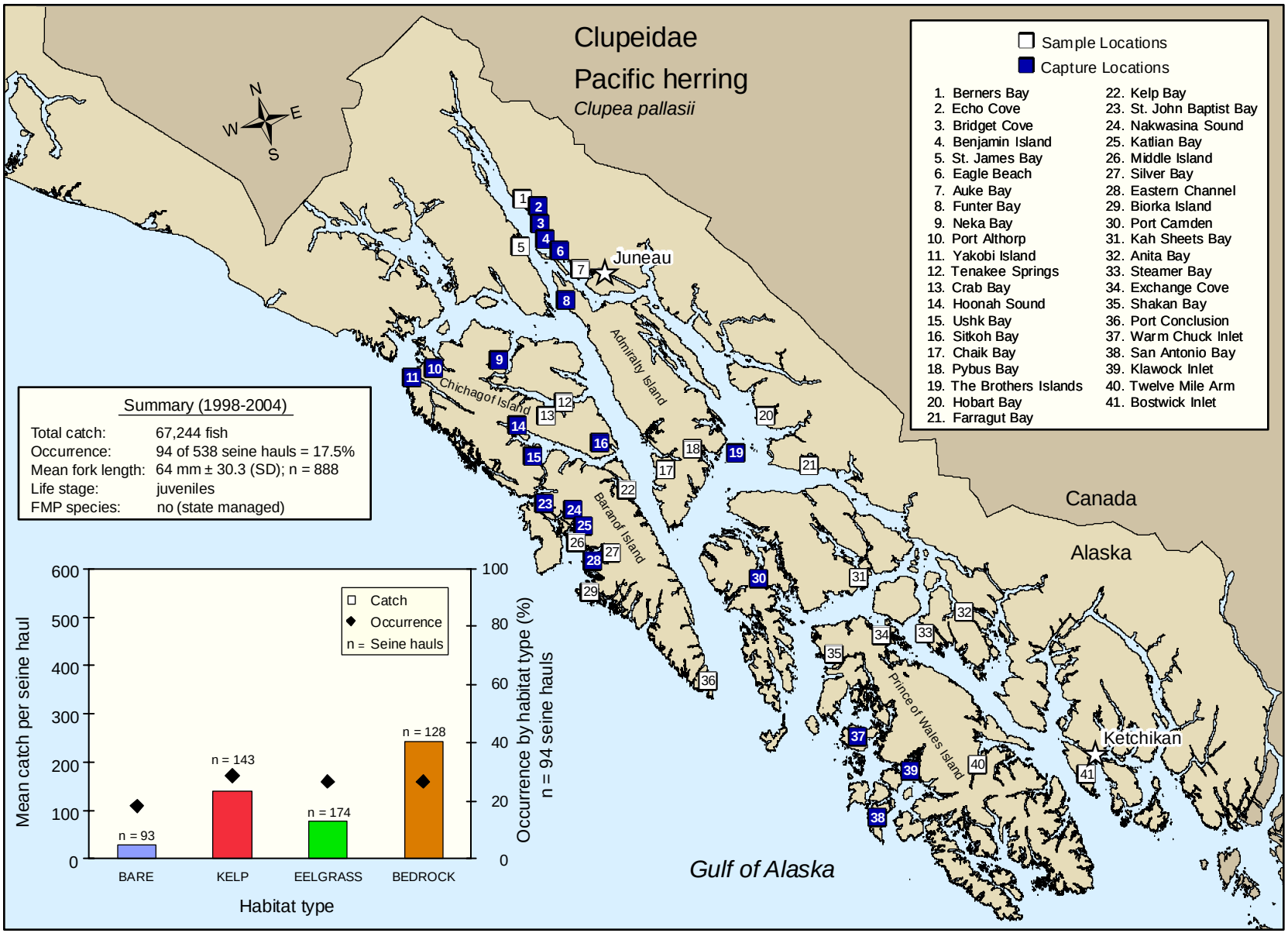
Distribution

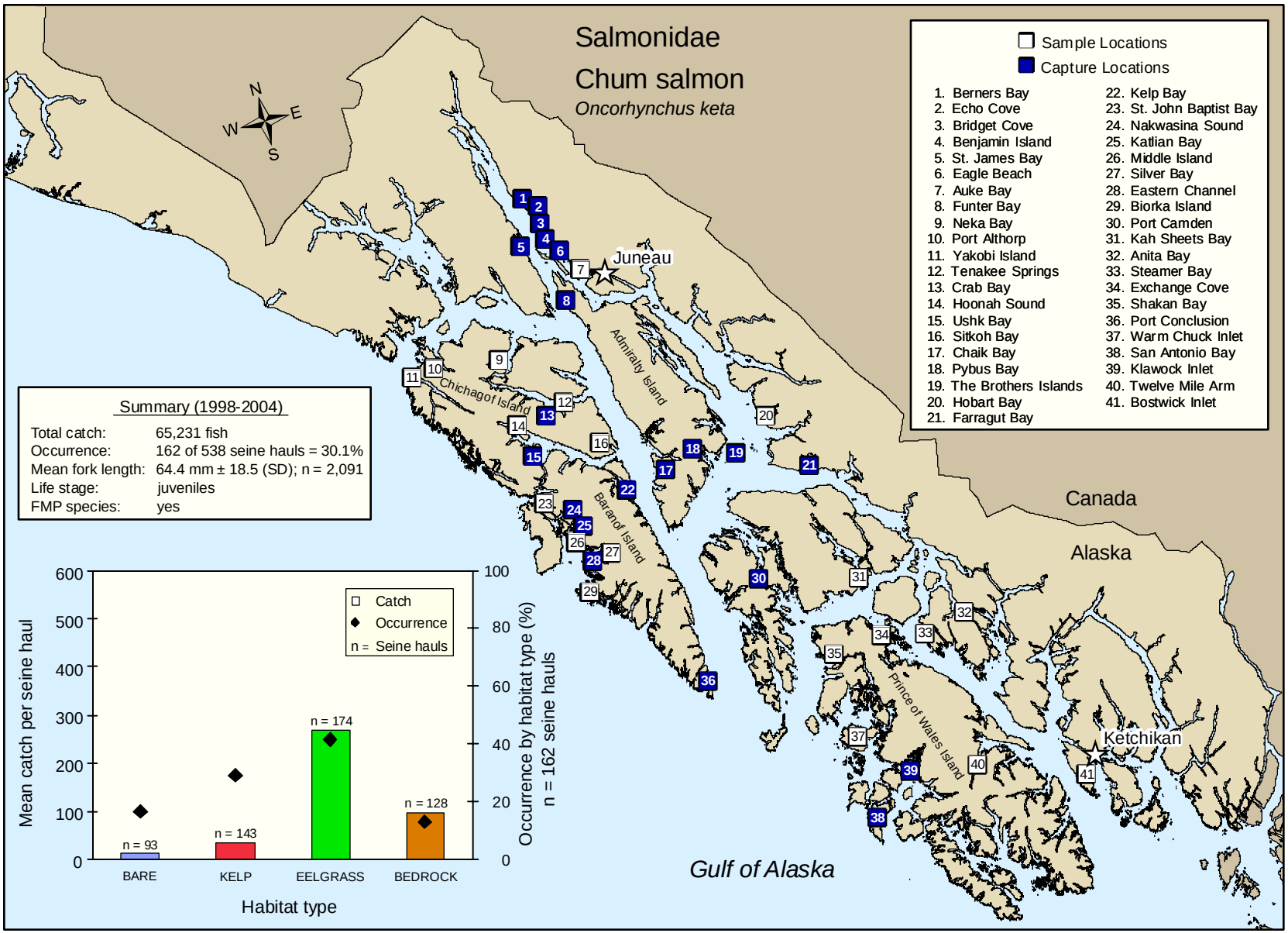
Distribution patterns were evident for many fish species. The two most ubiquitous species were crescent gunnel and northern sculpin (*Icelinus borealis*); each of these species was captured at 38 of 41 locations. The least abundant (50th rank) species captured was the tadpole sculpin (*Psychrolutes paradoxus*) occurring at only 2 of 41 locations. Species captured predominately in northern southeastern Alaska were yellowfin sole (*Limanda aspera*) and capelin (*Mallotus villosus*), whereas species captured predominately in southern southeastern Alaska were kelp perch (*Brachyistius frenatus*) and brown rockfish (*S. auriculatus*). Similarly, most rockfish (*Sebastes* spp.) were captured in more exposed outside waters, and armorhead sculpin (*Gymnocanthus galeatus*) in more sheltered inside waters.

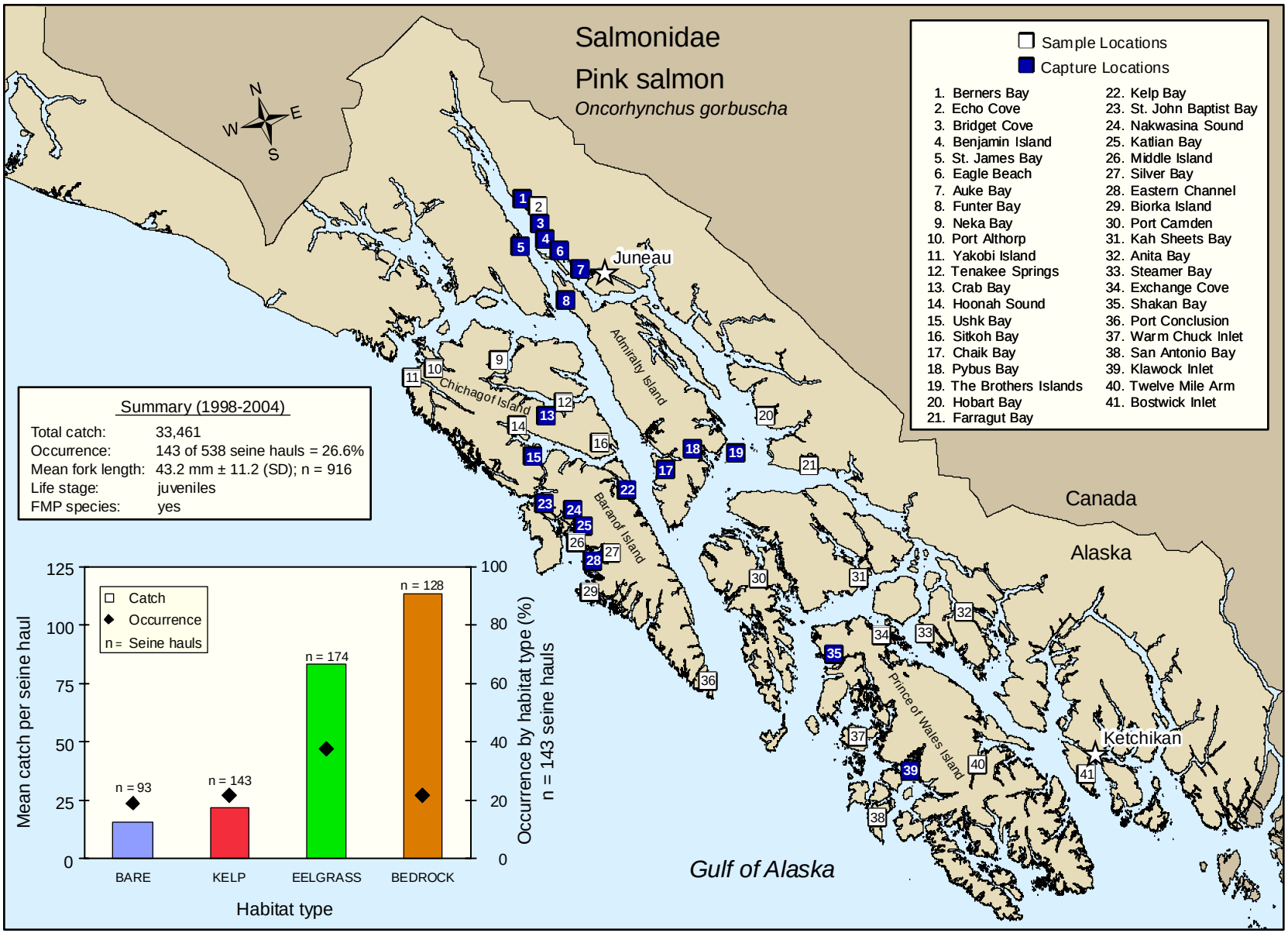
On the following pages, a distribution map is presented for each of the 50 most abundant species captured in decreasing order of abundance based on total catch. An example interpretation for a distribution map is as follows for walleye pollock: pollock were captured at 17 of 41 locations (blue squares); a total of 122,792 pollock were captured in 14.1% of all seine hauls; 1,769 fish were measured at a mean size of 55.2 mm FL; exclusively juveniles were captured; and walleye pollock are included in an FMP for Alaska. The graph shows that mean catch per seine haul for pollock was greatest in kelp at about 600 fish, and of the 76 seine hauls where pollock were captured, 47% were in kelp. Habitat types, geographic locations, dates sampled, number of seine hauls, and total catch by location are listed in Table 1.

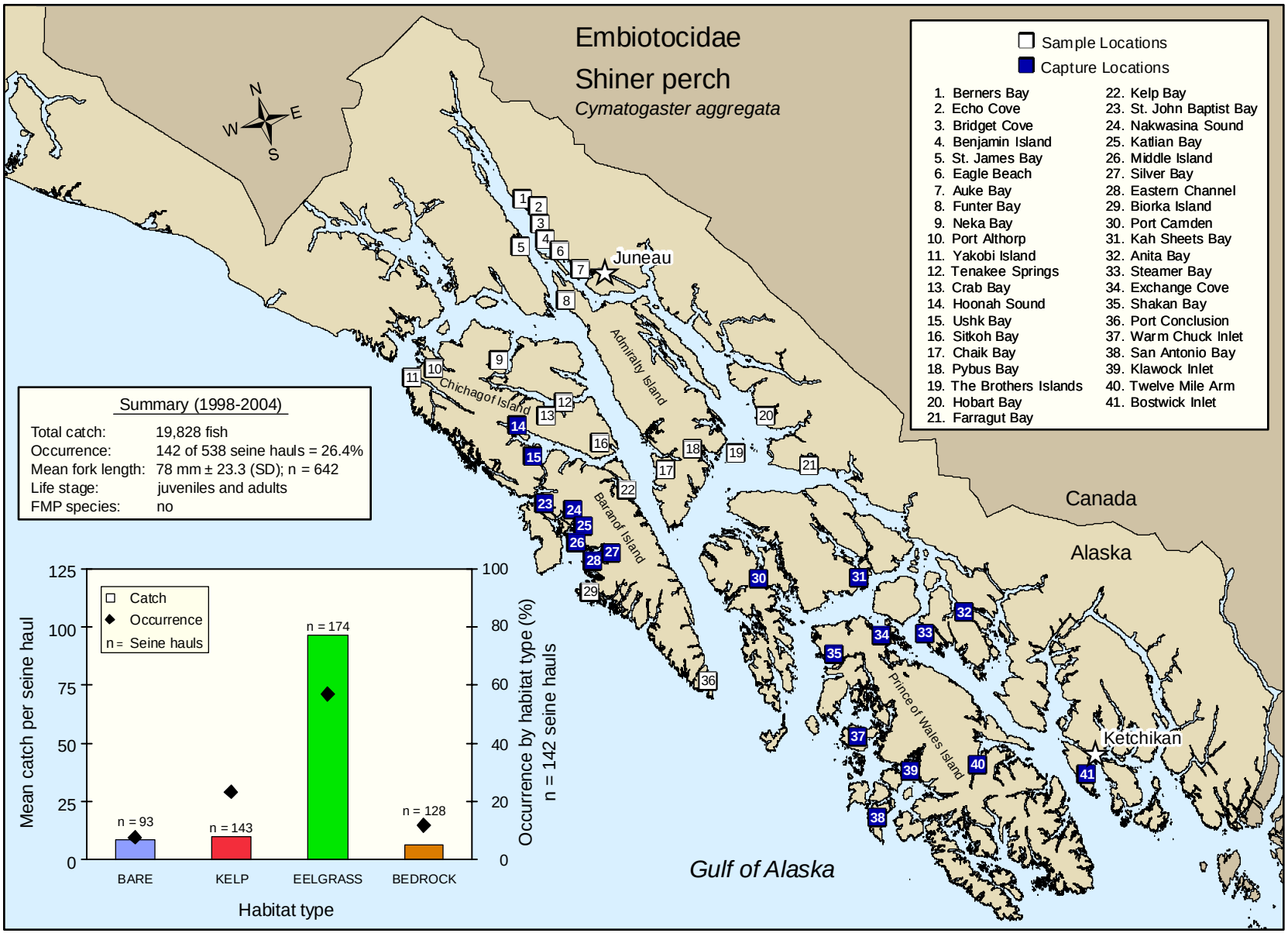

Gadidae
Walleye pollock
Theragra chalcogramma
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 122,792 fish
Occurrence: 76 of 538 seine hauls = 14.1%
Mean fork length: 55.2 mm ± 21.5 (SD); n = 1,769
Life stage: juveniles
FMP species: yes
Catch
Occurrence
n = Seine hauls
n = 143
n = 93
n = 174
n = 128
Mean catch per seine haul
Occurrence by habitat type (%)
n = 76 seine hauls
BARE
KELP
EELGRASS
BEDROCK
Habitat type

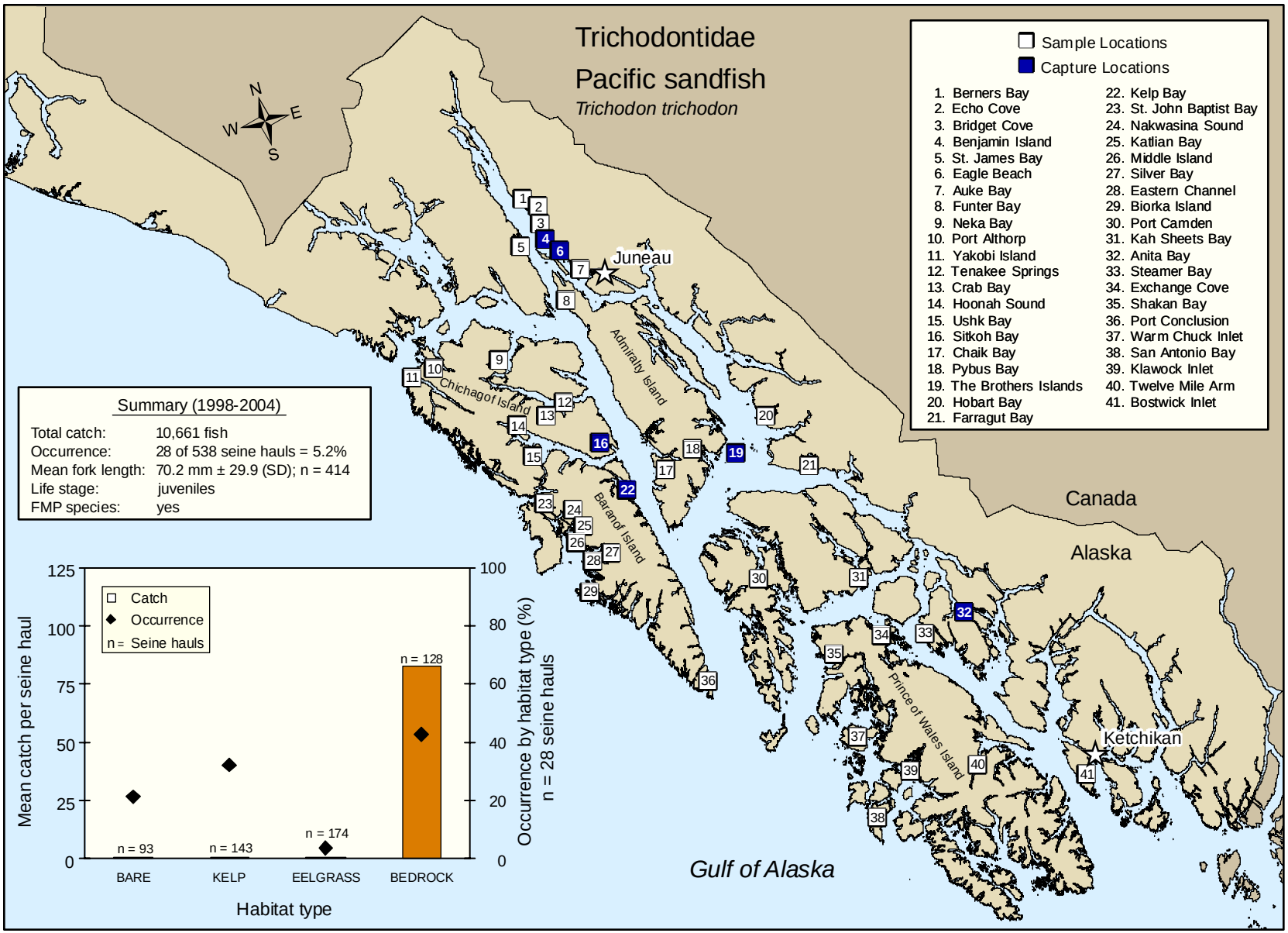

Ammodytidae
Pacific sand lance
Ammodytes hexapterus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 81,667 fish
Occurrence: 90 of 538 seine hauls = 16.7%
Mean fork length: 82.8 mm ± 29.2 (SD); n = 1,129
Life stage: juveniles and adults
FMP species: yes
Mean catch per seine haul
Occurrence by habitat type (%)
n = 90 seine hauls
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
E
S
W

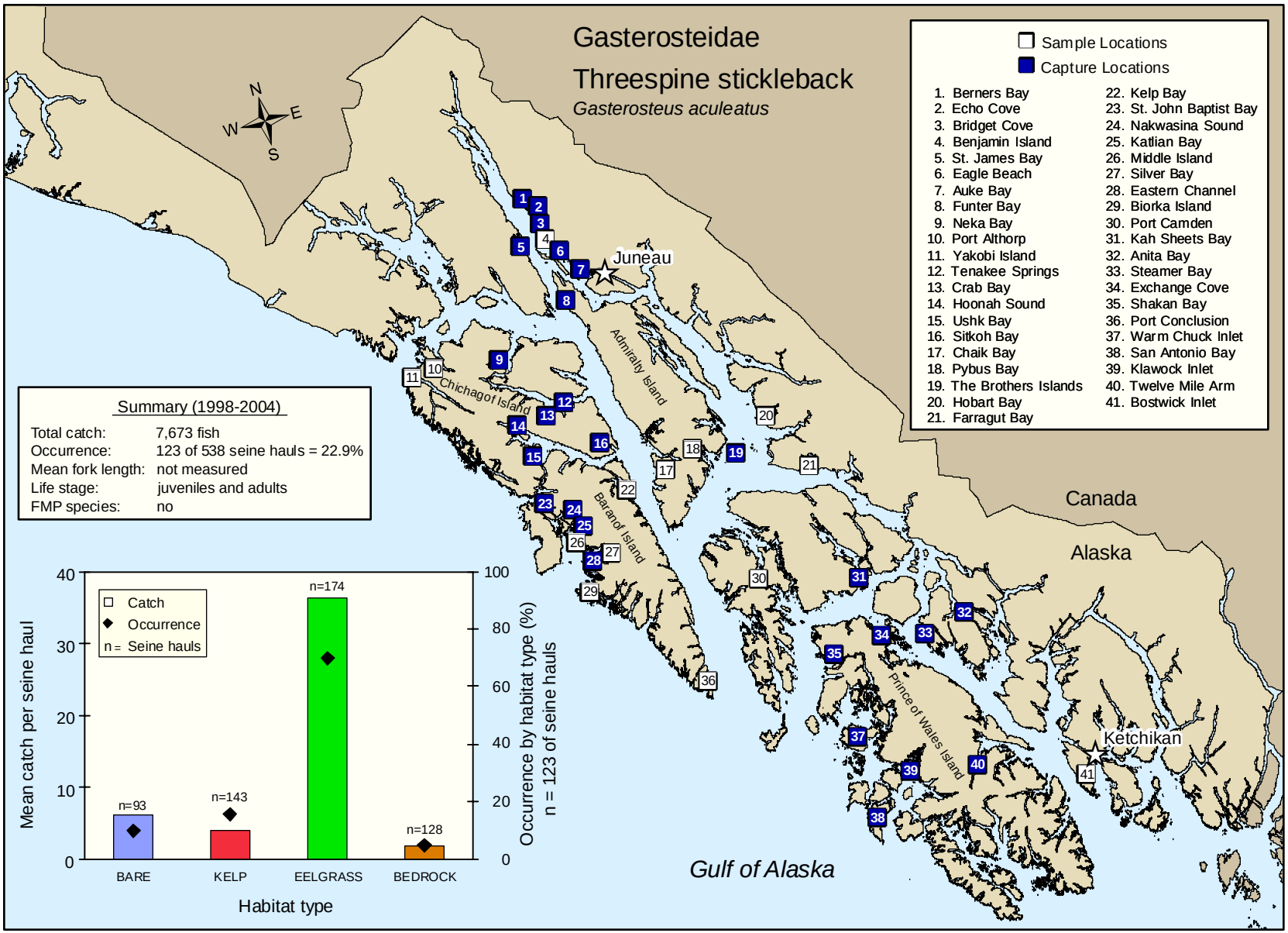

Clupeidae
Pacific herring
Clupea pallasii
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 67,244 fish
Occurrence: 94 of 538 seine hauls = 17.5%
Mean fork length: 64 mm ± 30.3 (SD); n = 888
Life stage: juveniles
FMP species: no (state managed)
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 94 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska

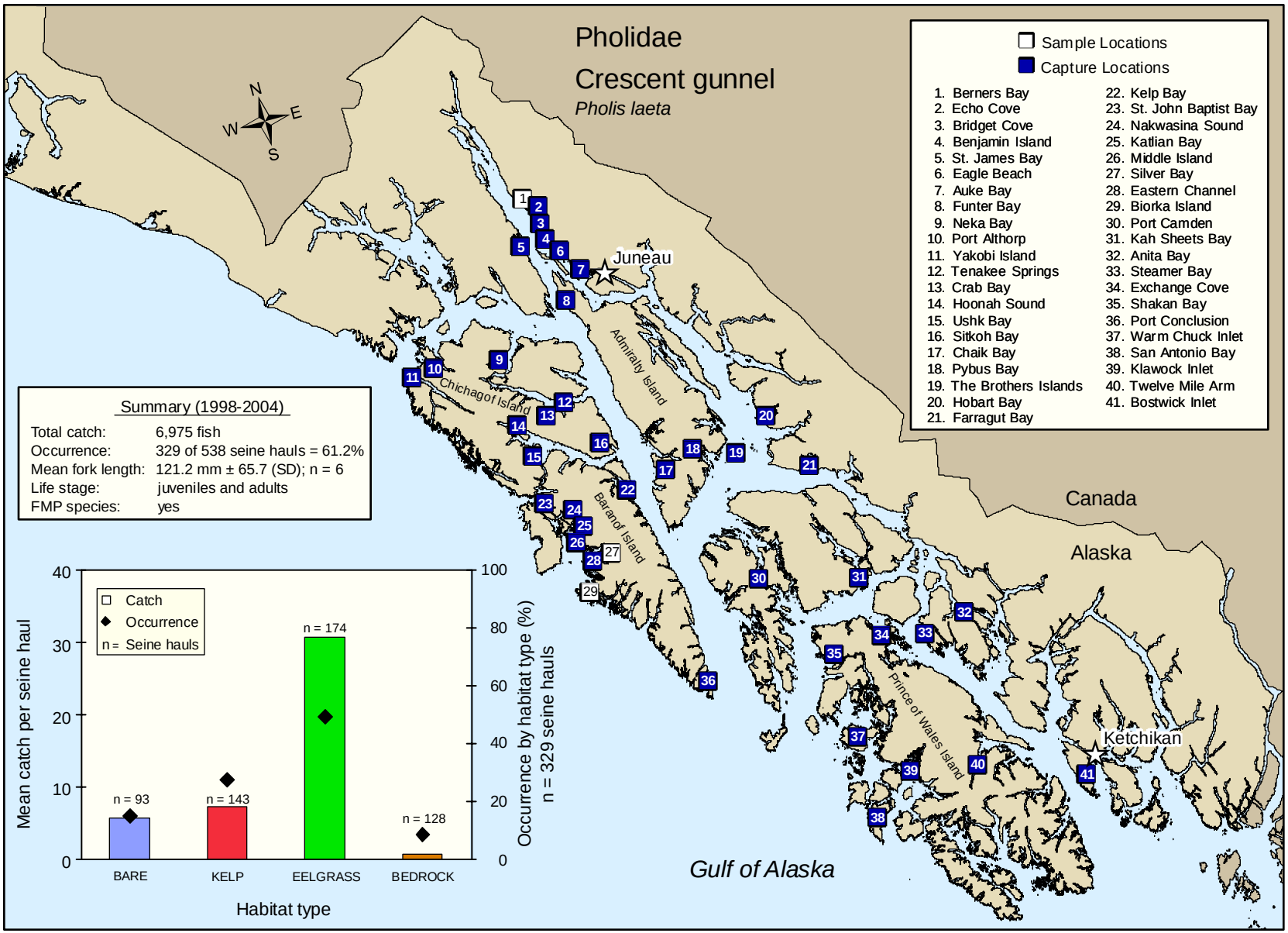

Salmonidae
Chum salmon
Oncorhynchus keta
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 65,231 fish
Occurrence: 162 of 538 seine hauls = 30.1%
Mean fork length: 64.4 mm ± 18.5 (SD); n = 2,091
Life stage: juveniles
FMP species: yes
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 162 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

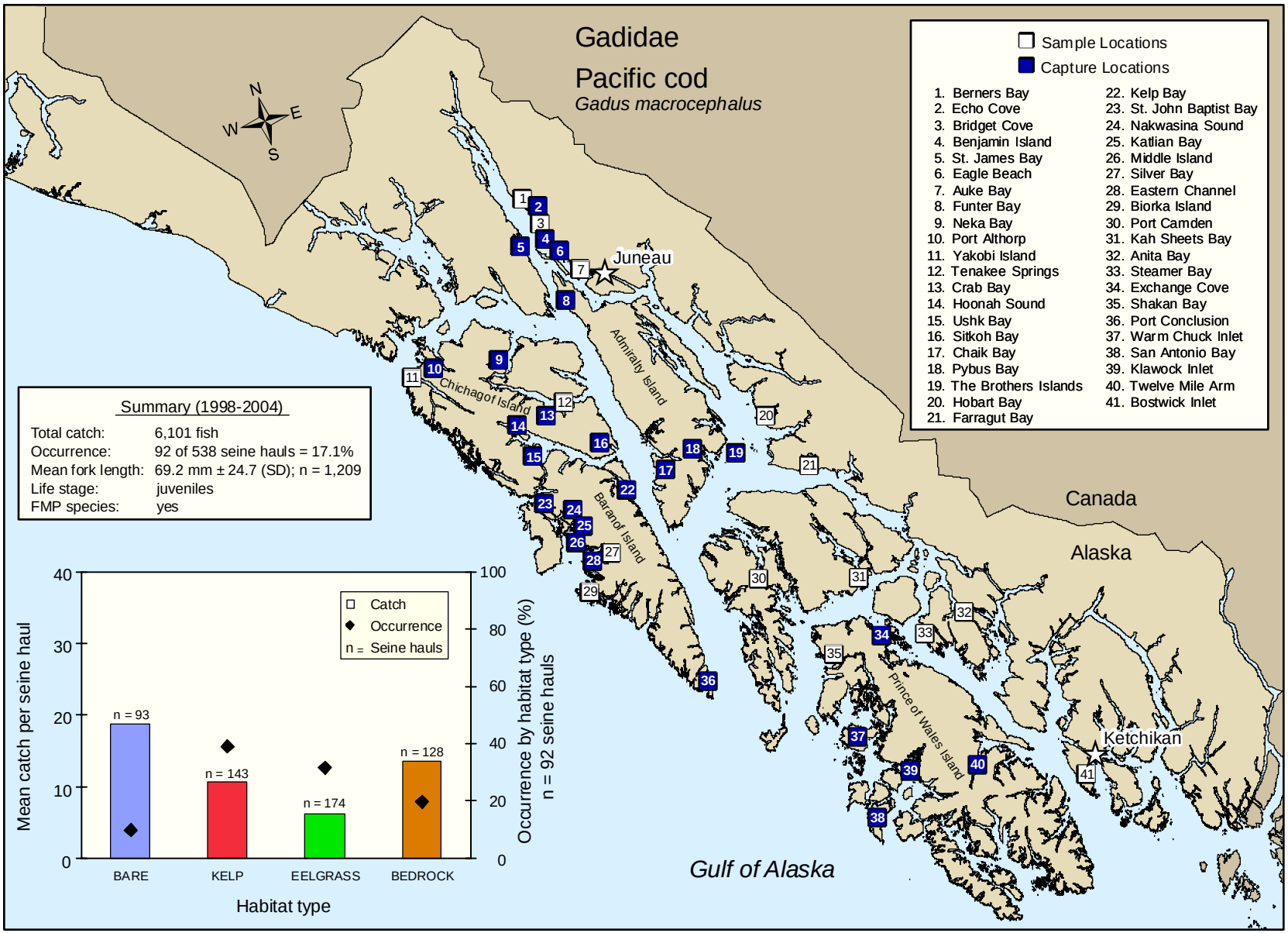

Salmonidae
Pink salmon
Oncorhynchus gorbuscha
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 33,461
Occurrence: 143 of 538 seine hauls = 26.6%
Mean fork length: 43.2 mm ± 11.2 (SD); n = 916
Life stage: juveniles
FMP species: yes
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
S
E
W
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 143 seine hauls
0
25
50
75
100
125
0
20
40
60
80
100

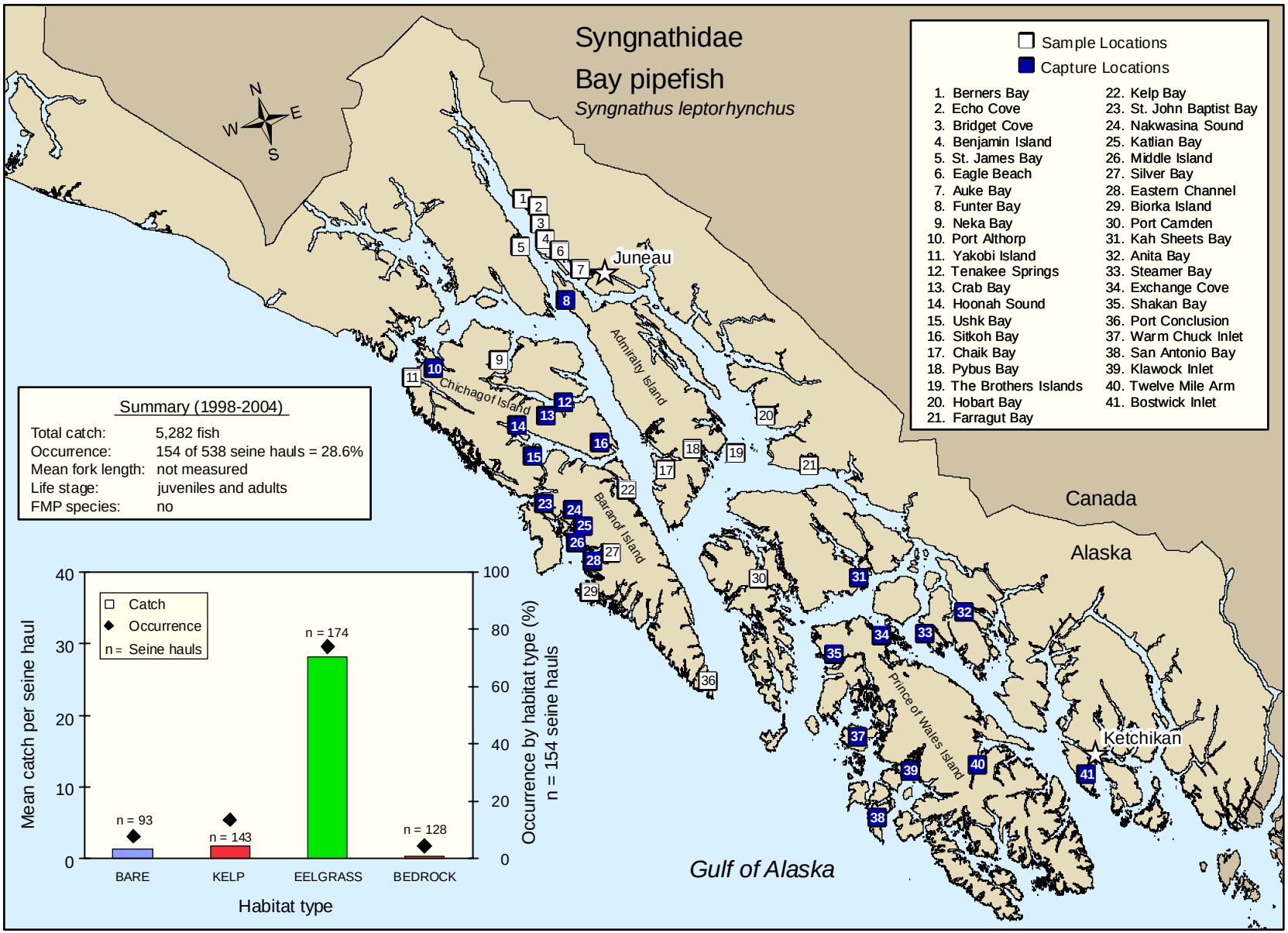

Embiotocidae
Shiner perch
Cymatogaster aggregata
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 19,828 fish
Occurrence: 142 of 538 seine hauls = 26.4%
Mean fork length: 78 mm ± 23.3 (SD); n = 642
Life stage: juveniles and adults
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 142 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska

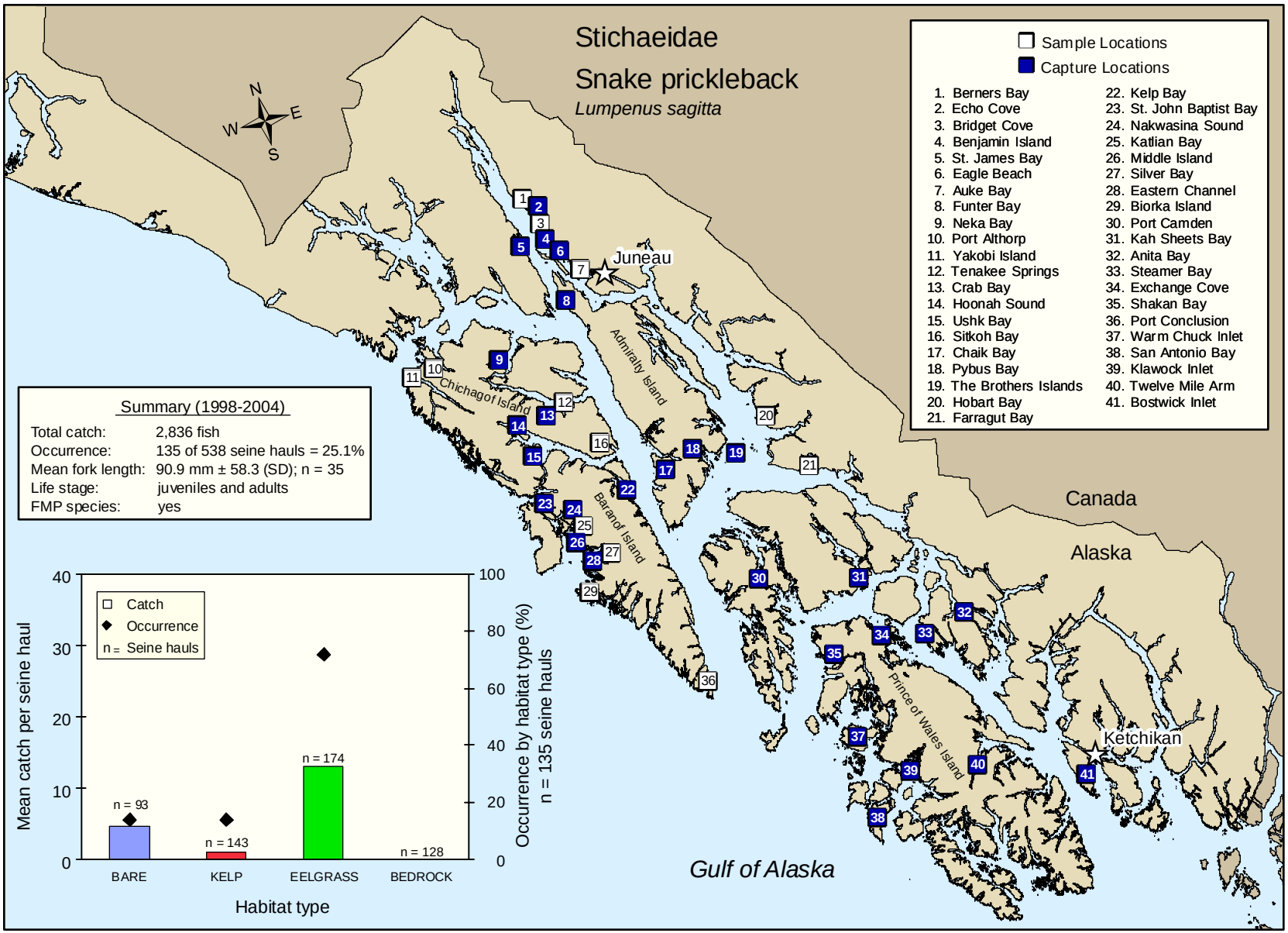

Trichodontidae
Pacific sandfish
Trichodon trichodon
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 10,661 fish
Occurrence: 28 of 538 seine hauls = 5.2%
Mean fork length: 70.2 mm ± 29.9 (SD); n = 414
Life stage: juveniles
FMP species: yes
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 28 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
S
E
W

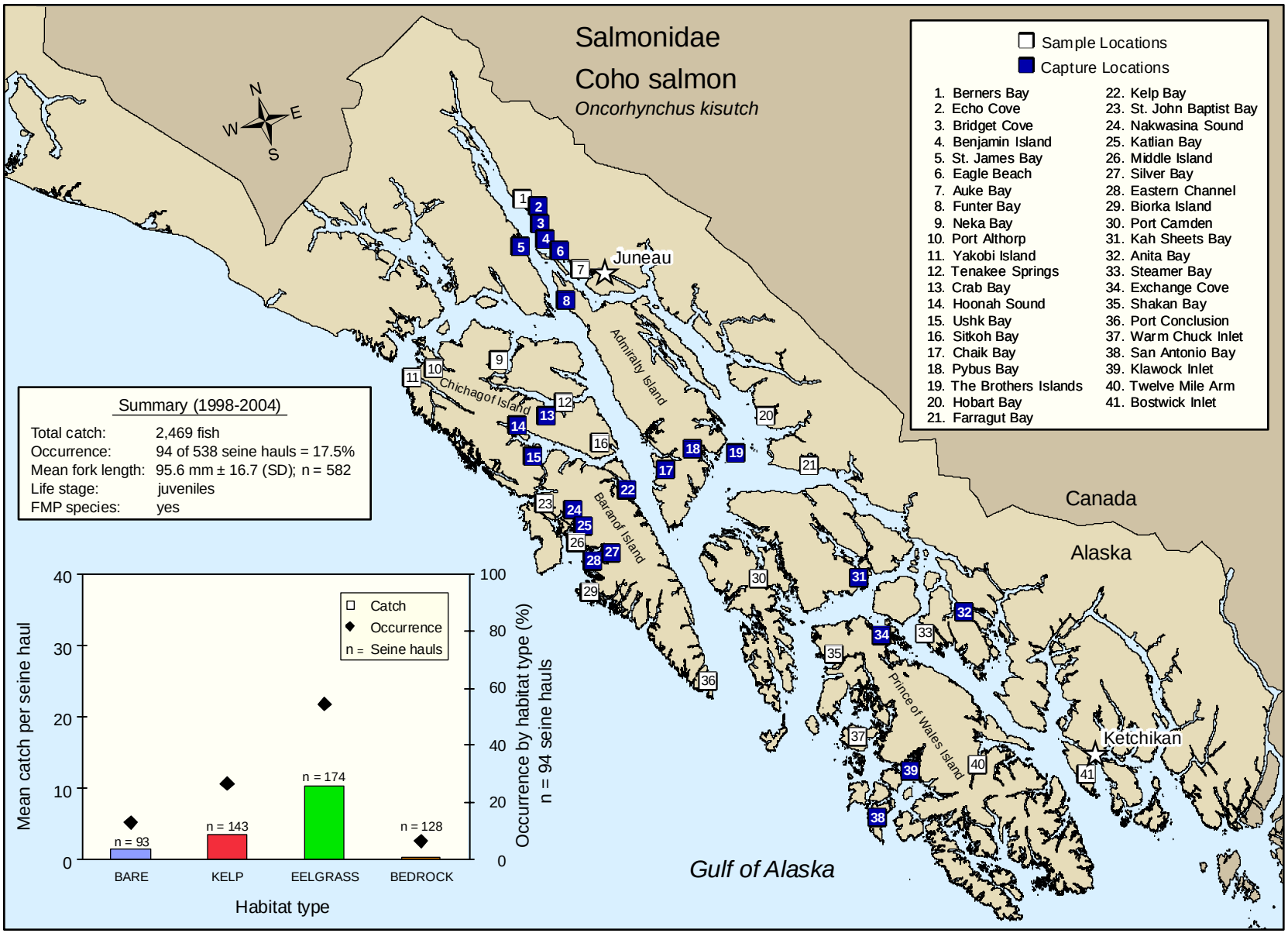

Gasterosteidae
Threespine stickleback
Gasterosteus aculeatus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 7,673 fish
Occurrence: 123 of 538 seine hauls = 22.9%
Mean fork length: not measured
Life stage: juveniles and adults
FMP species: no
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
S
E
W
Catch
Occurrence
n = Seine hauls
n=93
n=143
n=174
n=128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 123 of seine hauls

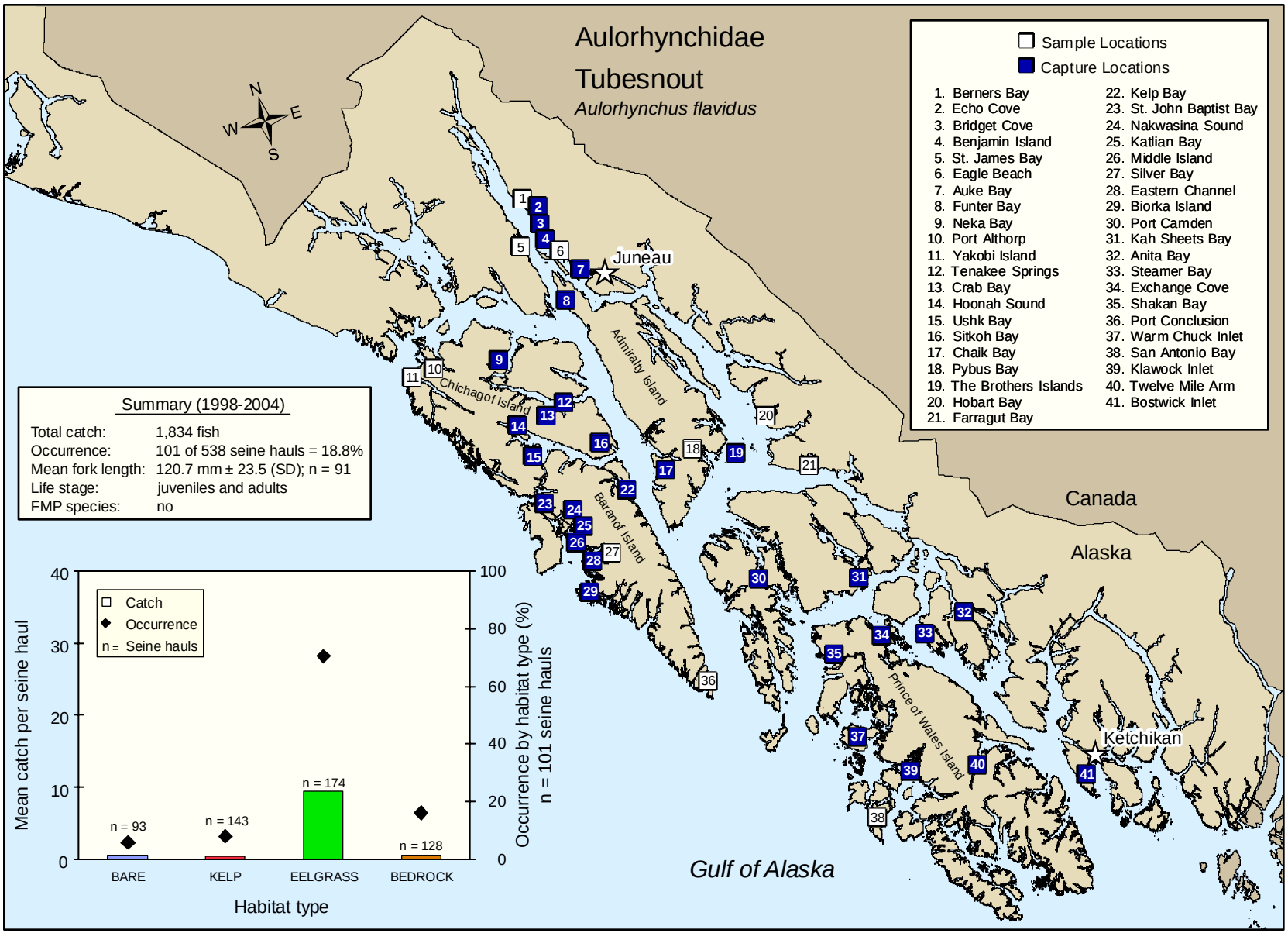

Pholidae
Crescent gunnel
Pholis laeta
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 6,975 fish
Occurrence: 329 of 538 seine hauls = 61.2%
Mean fork length: 121.2 mm ± 65.7 (SD); n = 6
Life stage: juveniles and adults
FMP species: yes
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 329 seine hauls
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
S
E
W

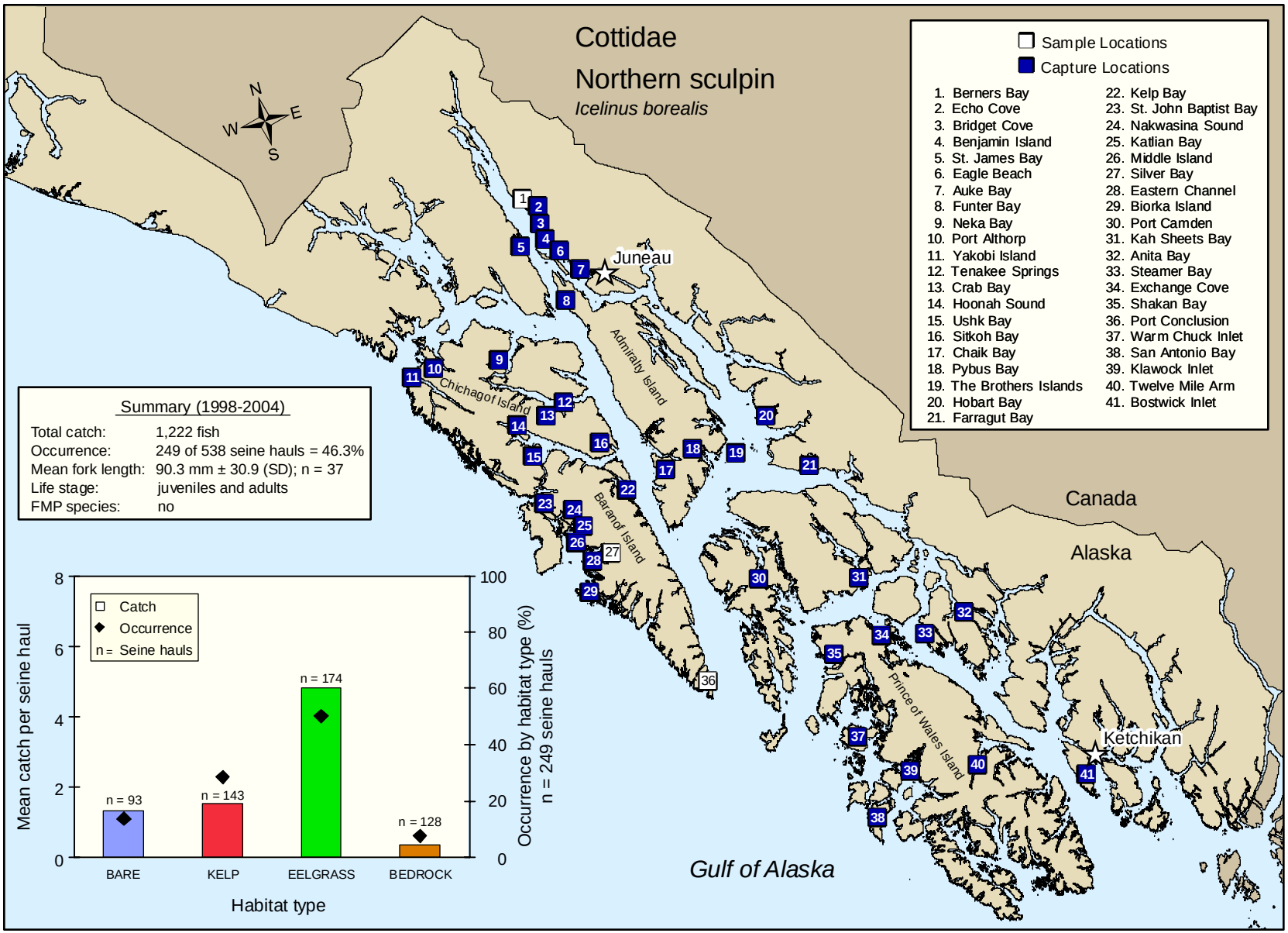

Gadidae
Pacific cod
Gadus macrocephalus
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 6,101 fish
Occurrence: 92 of 538 seine hauls = 17.1%
Mean fork length: 69.2 mm ± 24.7 (SD); n = 1,209
Life stage: juveniles
FMP species: yes
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 92 seine hauls

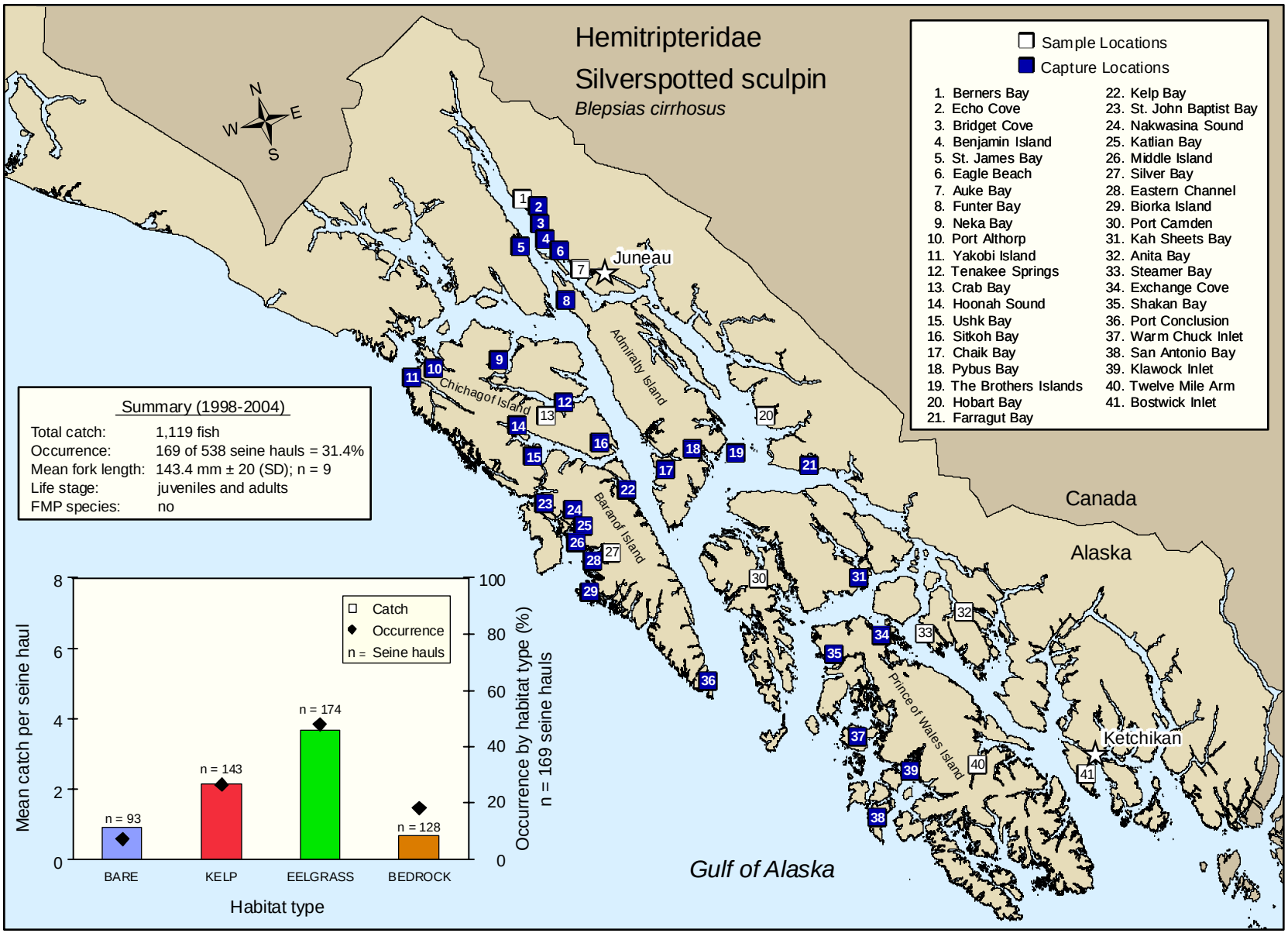

Syngnathidae
Bay pipefish
Syngnathus leptorhynchus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 5,282 fish
Occurrence: 154 of 538 seine hauls = 28.6%
Mean fork length: not measured
Life stage: juveniles and adults
FMP species: no
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 154 seine hauls
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska


Stichaeidae
Snake prickleback
Lumpenus sagitta
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 2,836 fish
Occurrence: 135 of 538 seine hauls = 25.1%
Mean fork length: 90.9 mm ± 58.3 (SD); n = 35
Life stage: juveniles and adults
FMP species: yes
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
S
E
W
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 135 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type


Salmonidae
Coho salmon
Oncorhynchus kisutch
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 2,469 fish
Occurrence: 94 of 538 seine hauls = 17.5%
Mean fork length: 95.6 mm ± 16.7 (SD); n = 582
Life stage: juveniles
FMP species: yes
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
S
E
W
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 94 seine hauls


Aulorhynchidae
Tubesnout
Aulorhynchus flavidus
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 1,834 fish
Occurrence: 101 of 538 seine hauls = 18.8%
Mean fork length: 120.7 mm ± 23.5 (SD); n = 91
Life stage: juveniles and adults
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 101 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type


Cottidae
Northern sculpin
Icelinus borealis
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 1,222 fish
Occurrence: 249 of 538 seine hauls = 46.3%
Mean fork length: 90.3 mm ± 30.9 (SD); n = 37
Life stage: juveniles and adults
FMP species: no
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 249 seine hauls


Hemitripteridae
Silverspotted sculpin
Blepsias cirrhosus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 1,119 fish
Occurrence: 169 of 538 seine hauls = 31.4%
Mean fork length: 143.4 mm ± 20 (SD); n = 9
Life stage: juveniles and adults
FMP species: no
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 169 seine hauls
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
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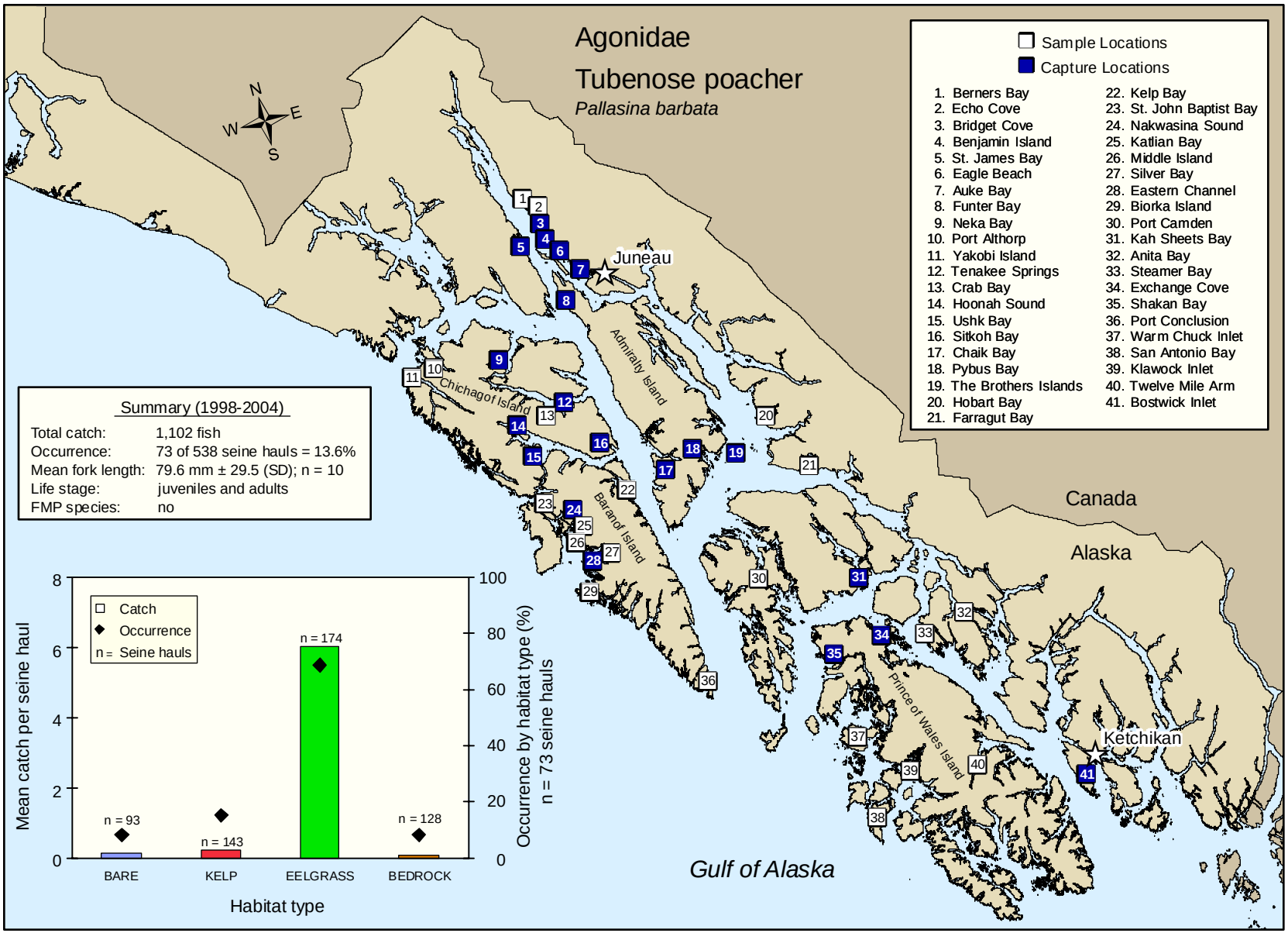
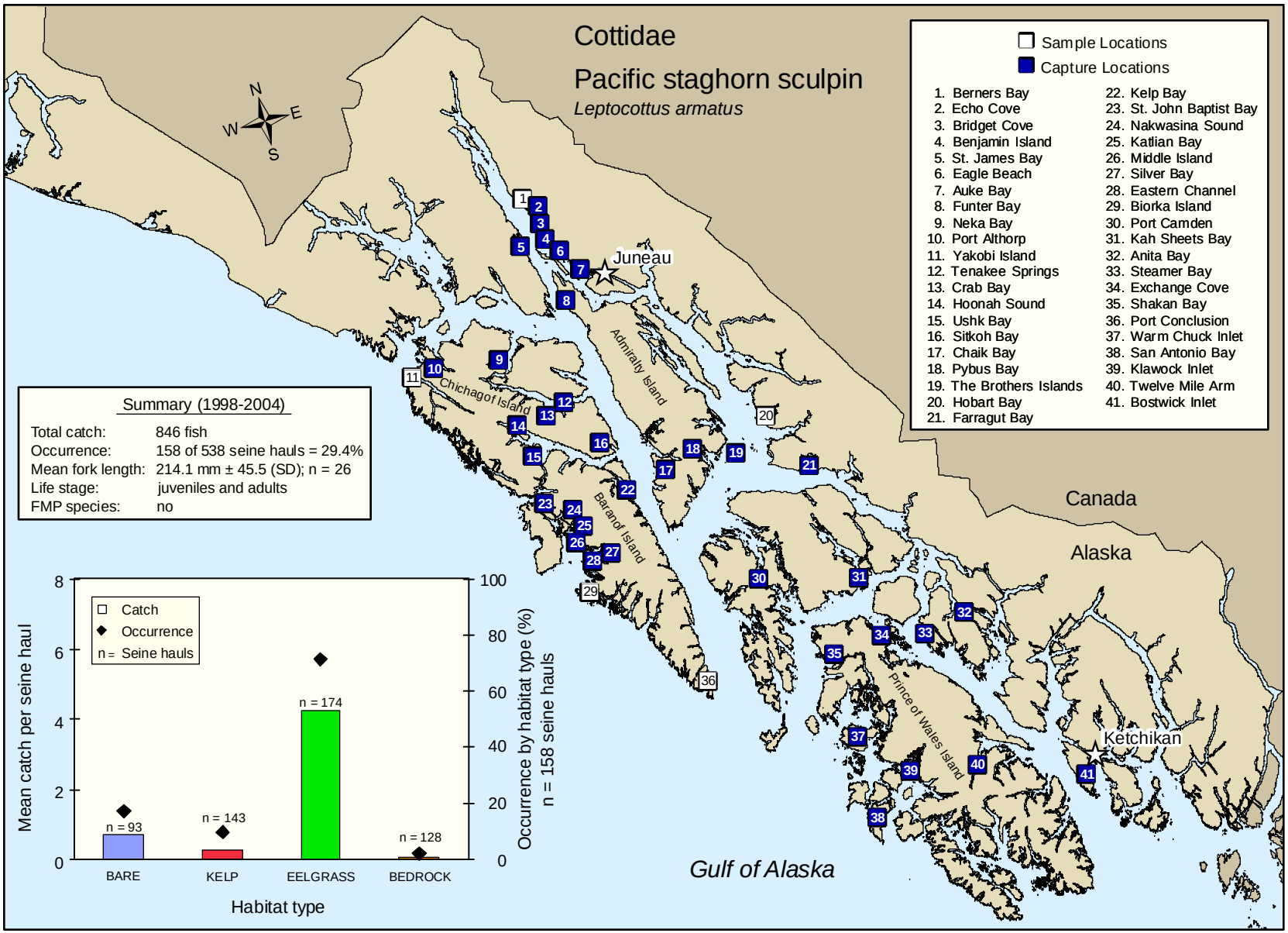
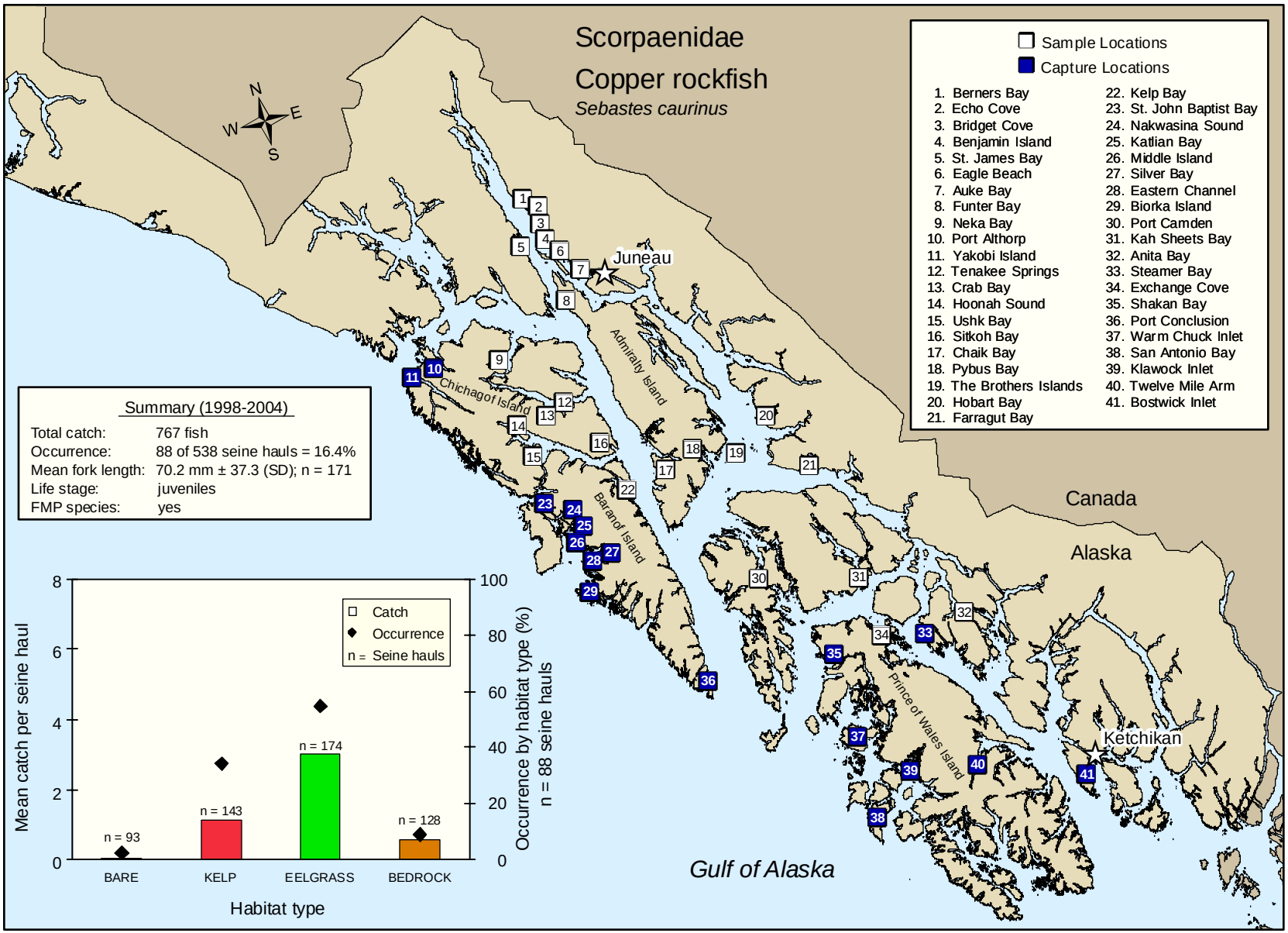
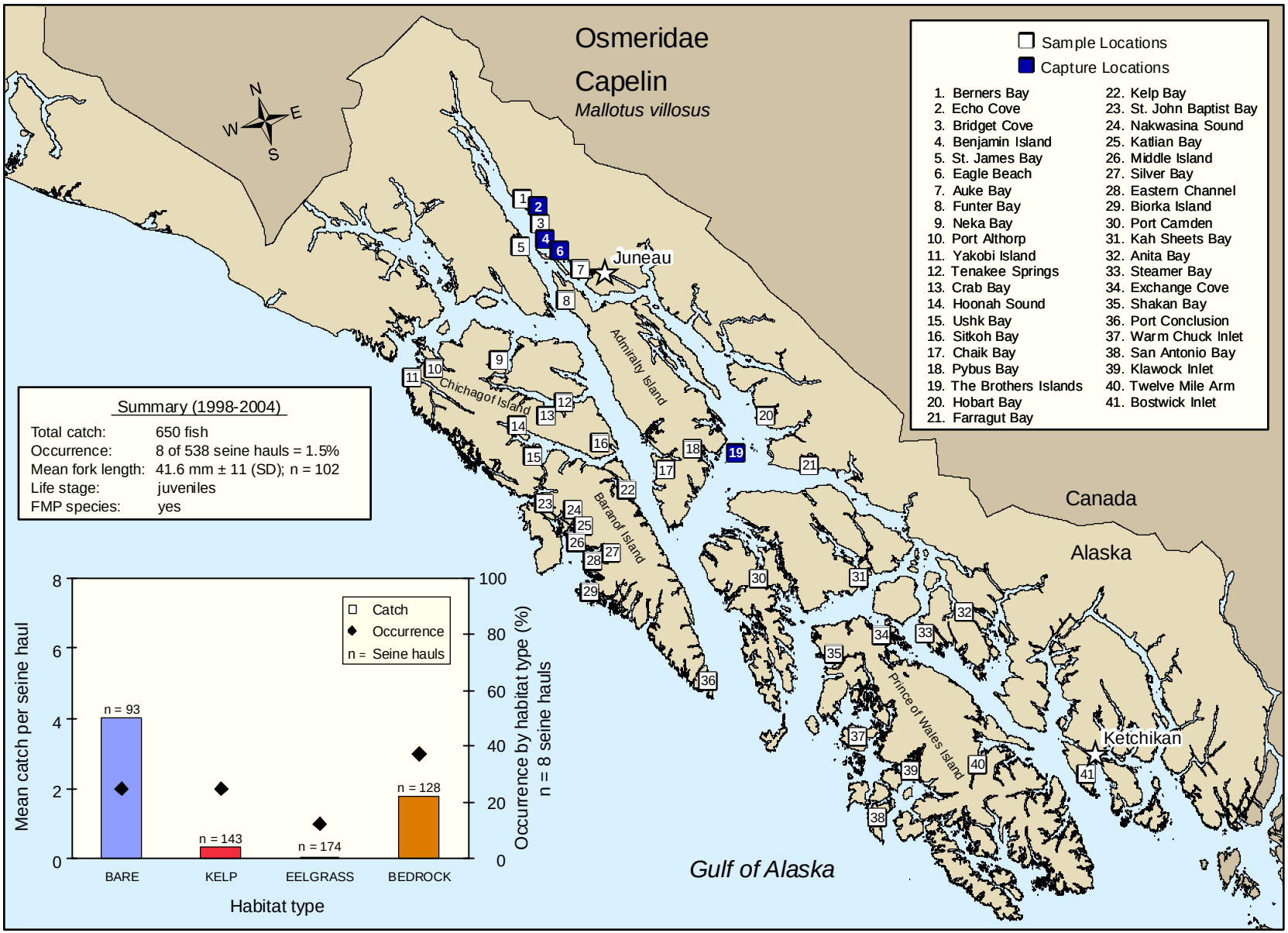
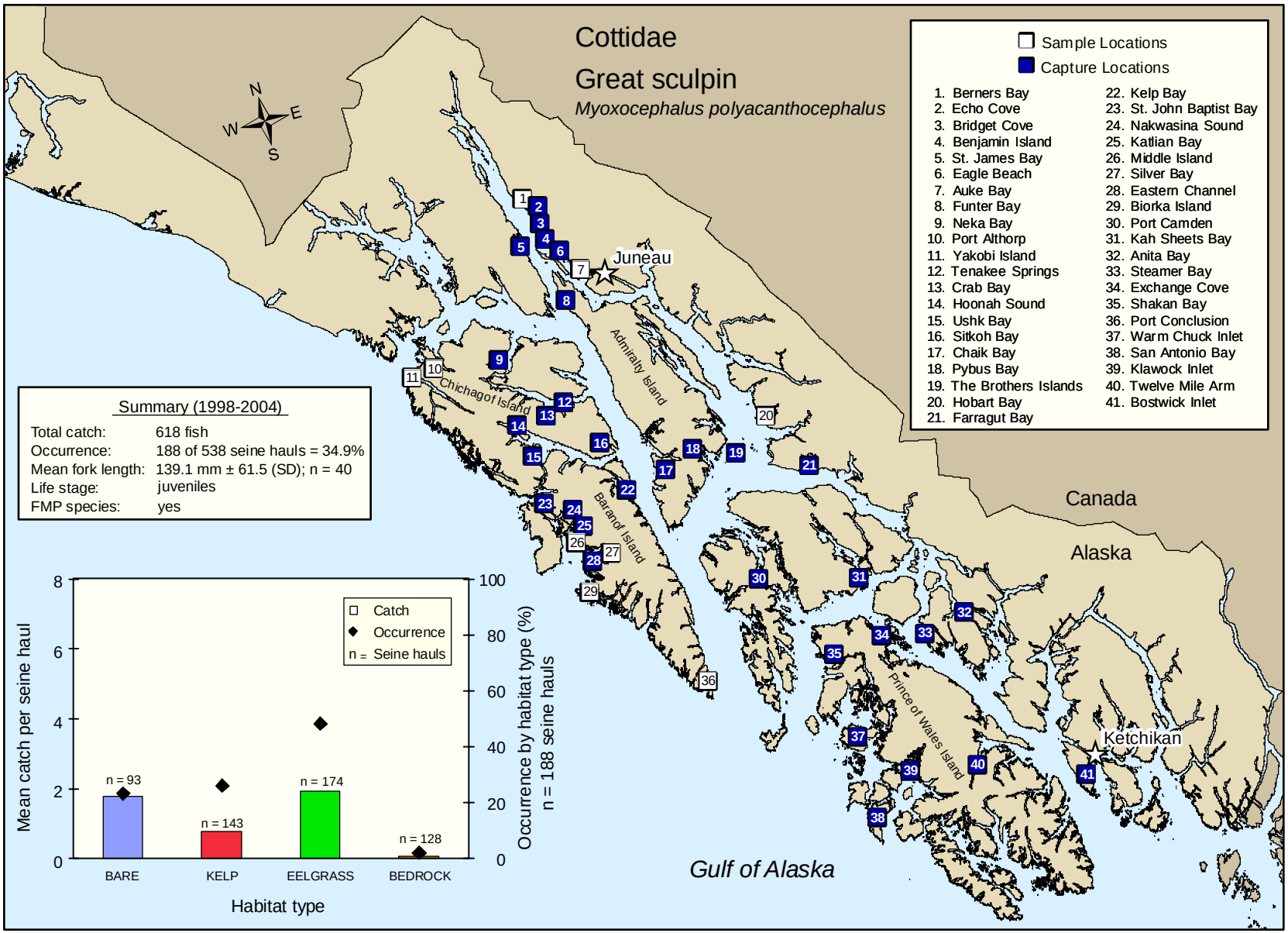
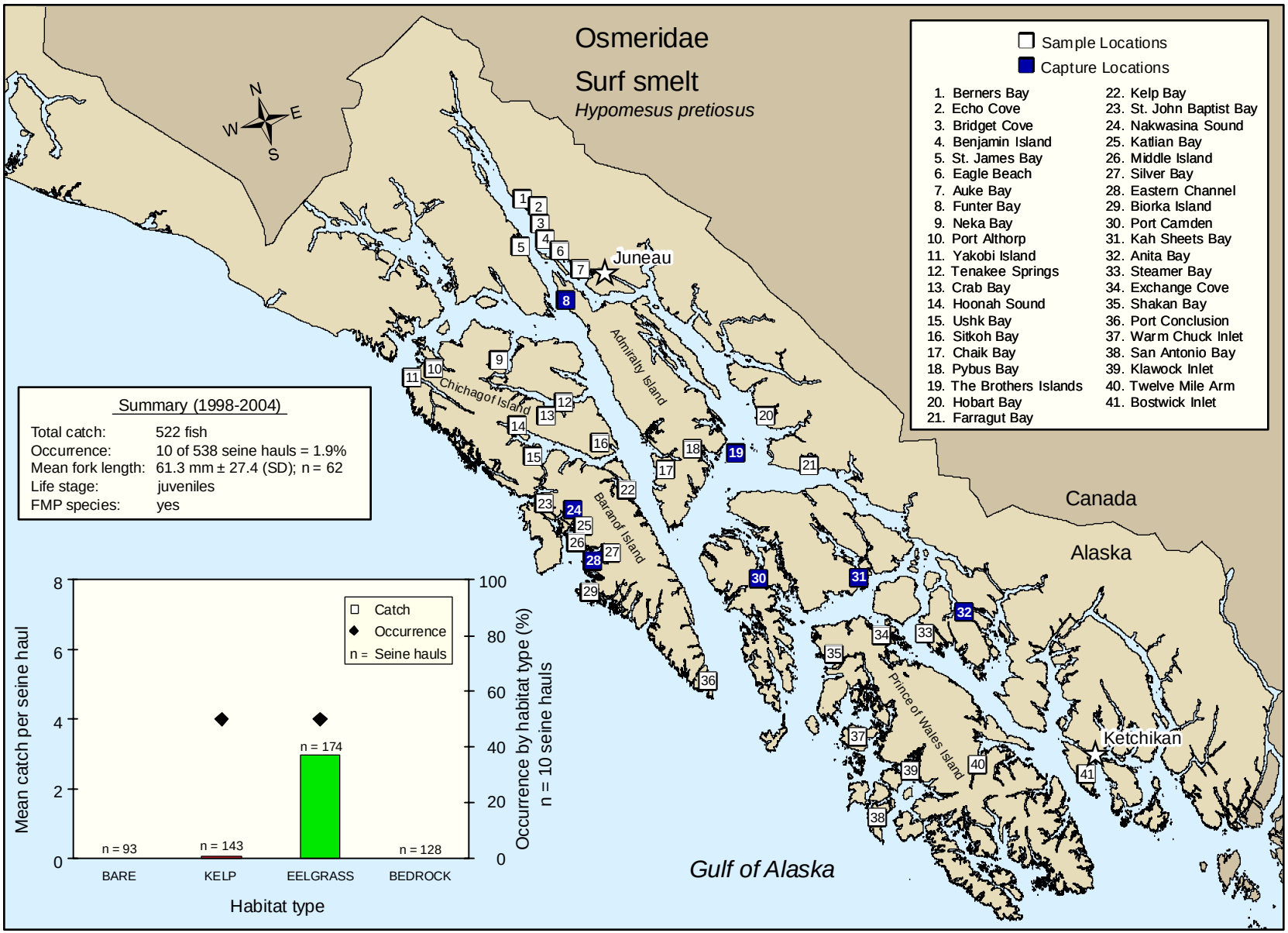

Agonidae
Tubenose poacher
Pallasina barbata
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 1,102 fish
Occurrence: 73 of 538 seine hauls = 13.6%
Mean fork length: 79.6 mm ± 29.5 (SD); n = 10
Life stage: juveniles and adults
FMP species: no
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
S
E
W
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 73 seine hauls

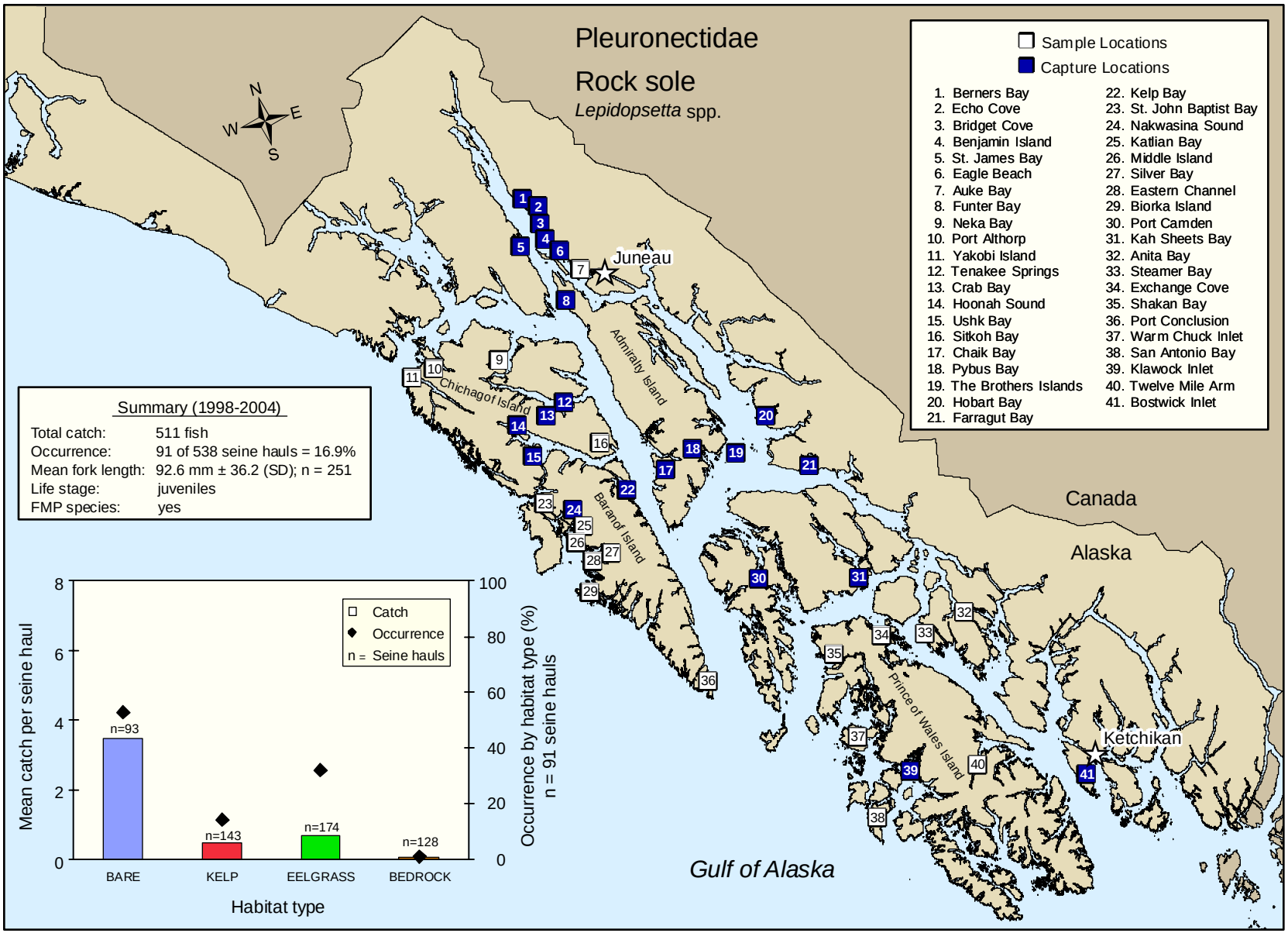

Cottidae
Pacific staghorn sculpin
Leptocottus armatus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 846 fish
Occurrence: 158 of 538 seine hauls = 29.4%
Mean fork length: 214.1 mm ± 45.5 (SD); n = 26
Life stage: juveniles and adults
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 158 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska

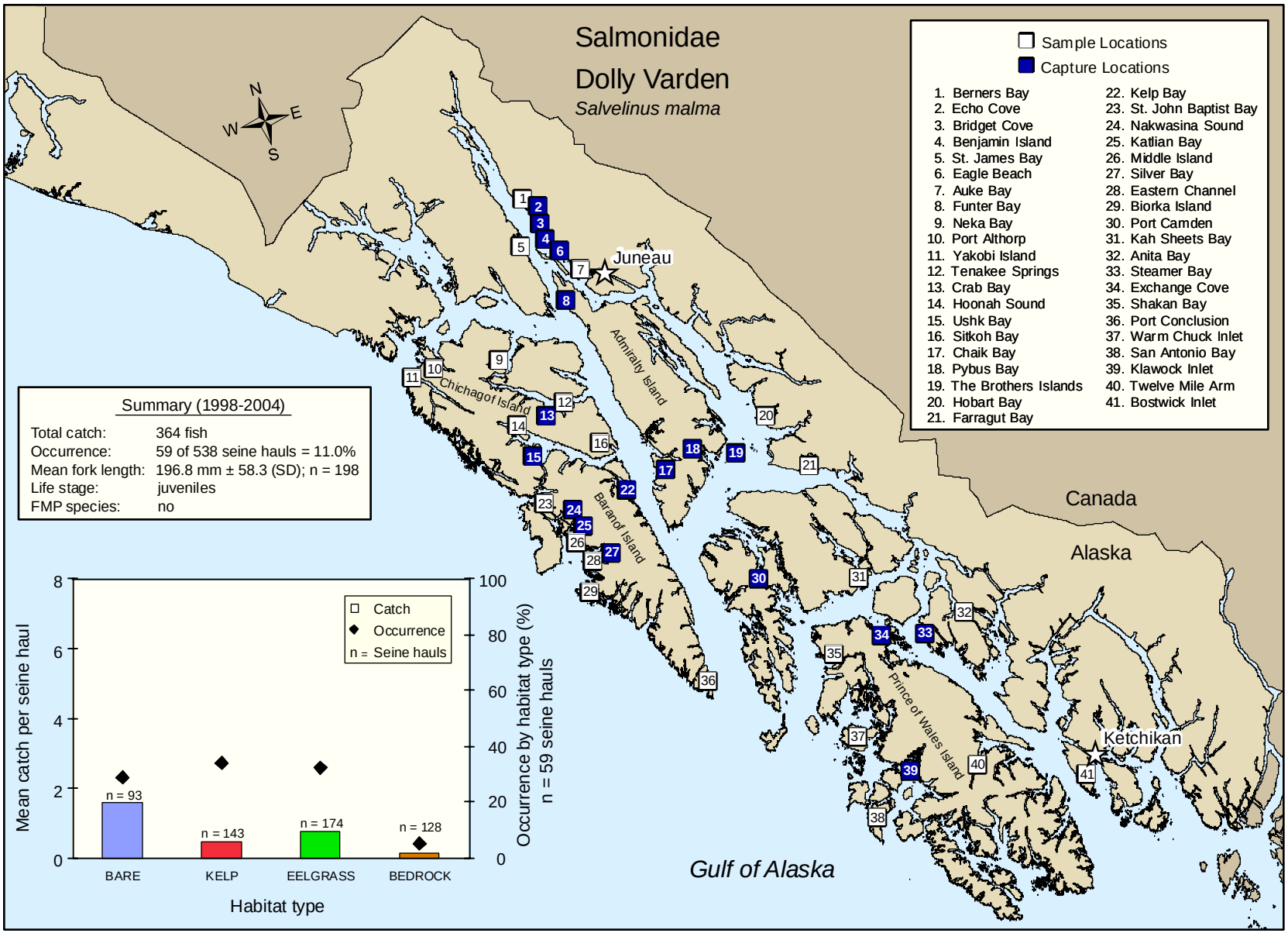

Scorpaenidae
Copper rockfish
Sebastes caurinus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 767 fish
Occurrence: 88 of 538 seine hauls = 16.4%
Mean fork length: 70.2 mm ± 37.3 (SD); n = 171
Life stage: juveniles
FMP species: yes
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 88 seine hauls

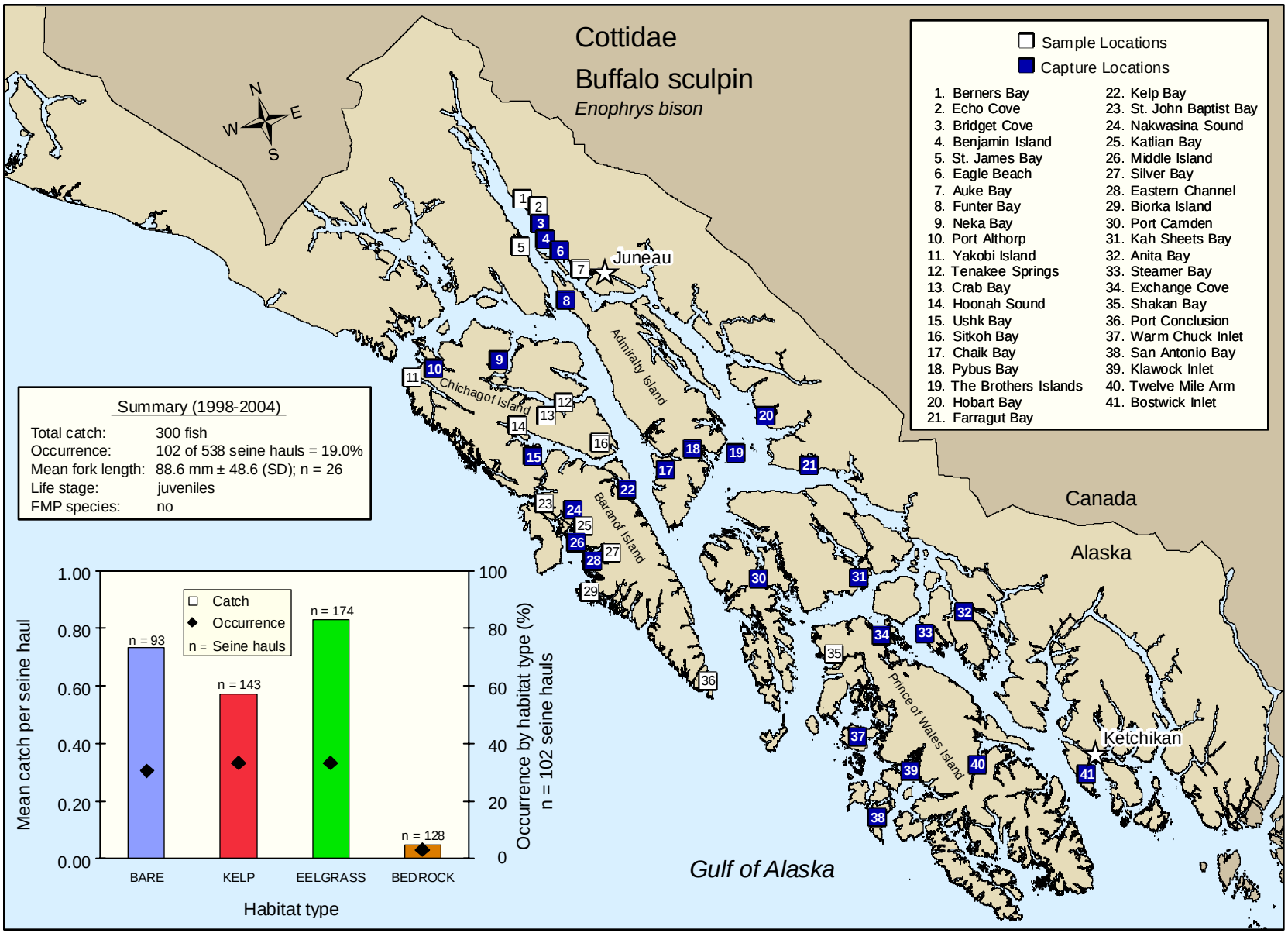

Osmeridae
Capelin
Mallotus villosus
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 650 fish
Occurrence: 8 of 538 seine hauls = 1.5%
Mean fork length: 41.6 mm ± 11 (SD); n = 102
Life stage: juveniles
FMP species: yes
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 8 seine hauls

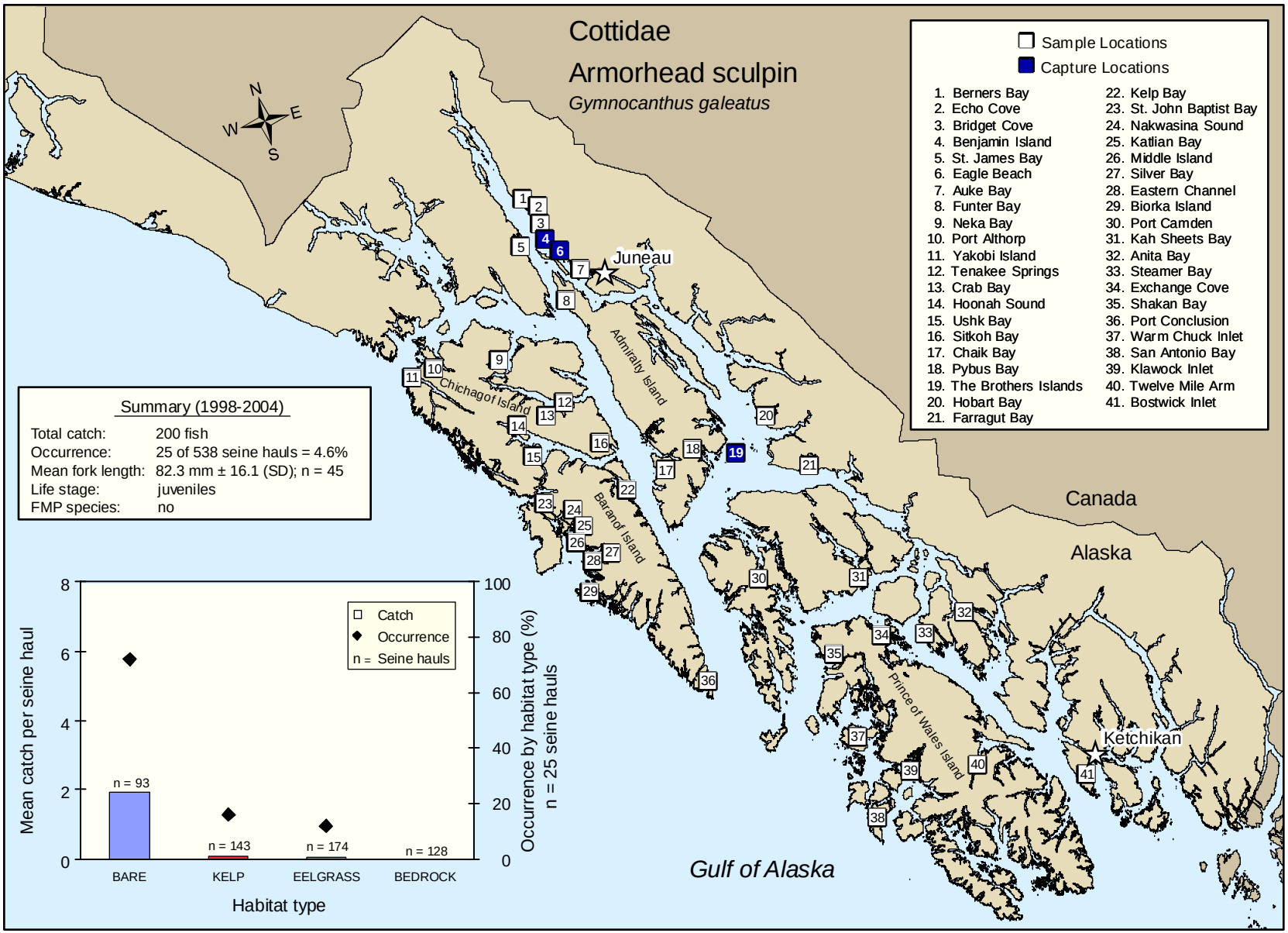

Cottidae
Great sculpin
Myoxocephalus polyacanthocephalus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 618 fish
Occurrence: 188 of 538 seine hauls = 34.9%
Mean fork length: 139.1 mm ± 61.5 (SD); n = 40
Life stage: juveniles
FMP species: yes
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 188 seine hauls

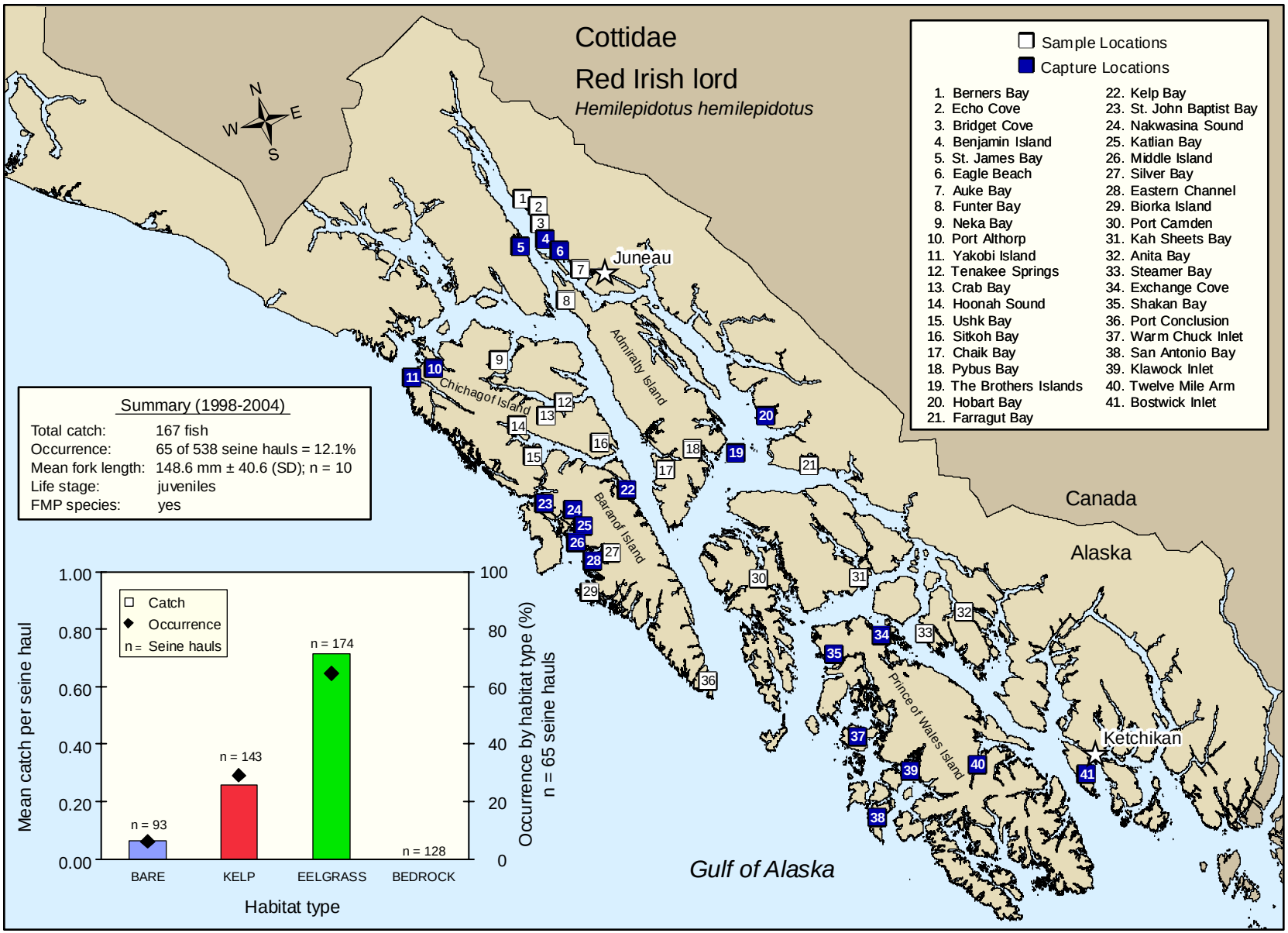

Osmeridae
Surf smelt
Hypomesus pretiosus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 522 fish
Occurrence: 10 of 538 seine hauls = 1.9%
Mean fork length: 61.3 mm ± 27.4 (SD); n = 62
Life stage: juveniles
FMP species: yes
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 10 seine hauls

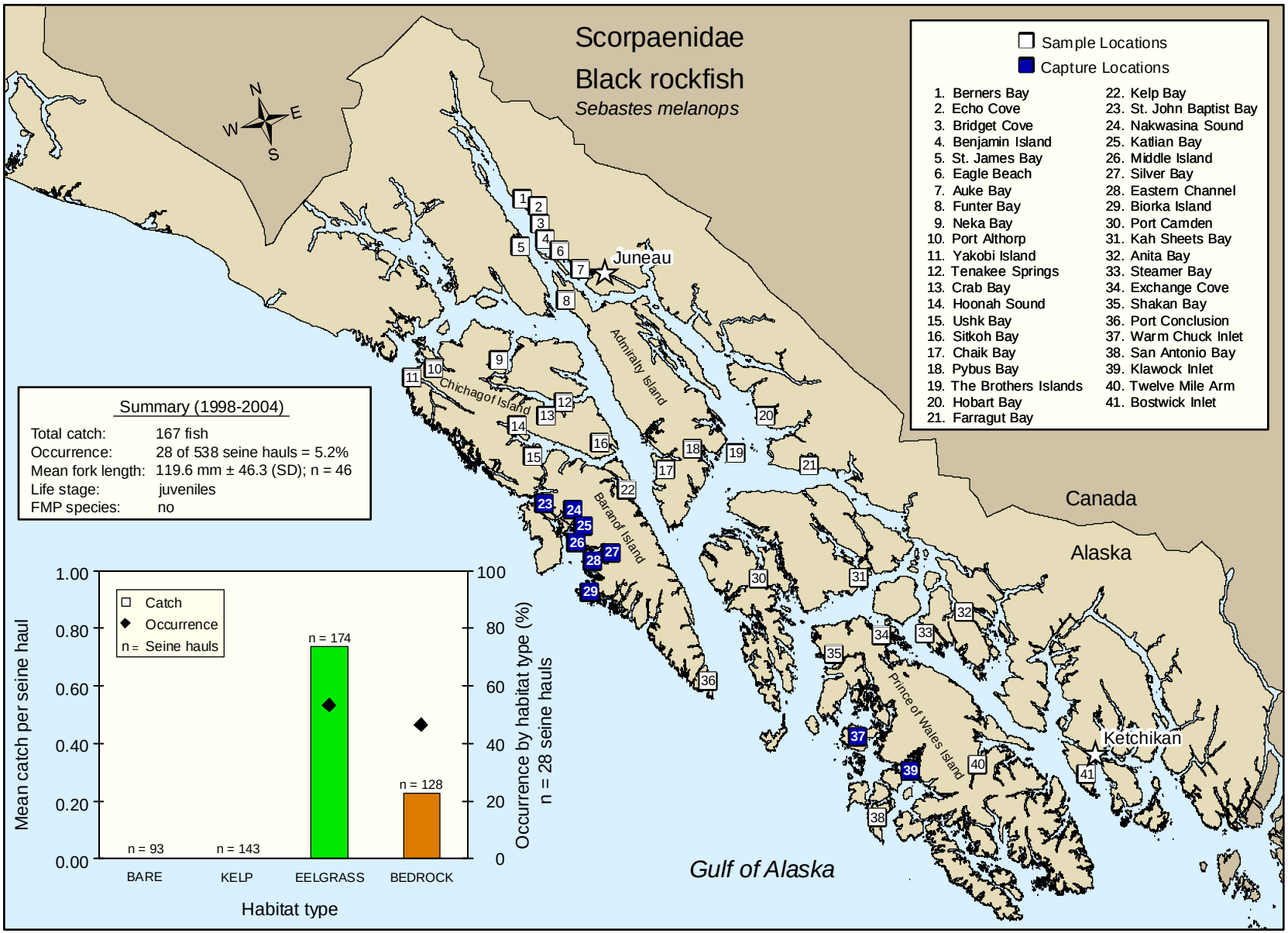

Pleuronectidae
Rock sole
Lepidopsetta spp.
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 511 fish
Occurrence: 91 of 538 seine hauls = 16.9%
Mean fork length: 92.6 mm ± 36.2 (SD); n = 251
Life stage: juveniles
FMP species: yes
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 91 seine hauls
n=93
n=143
n=174
n=128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

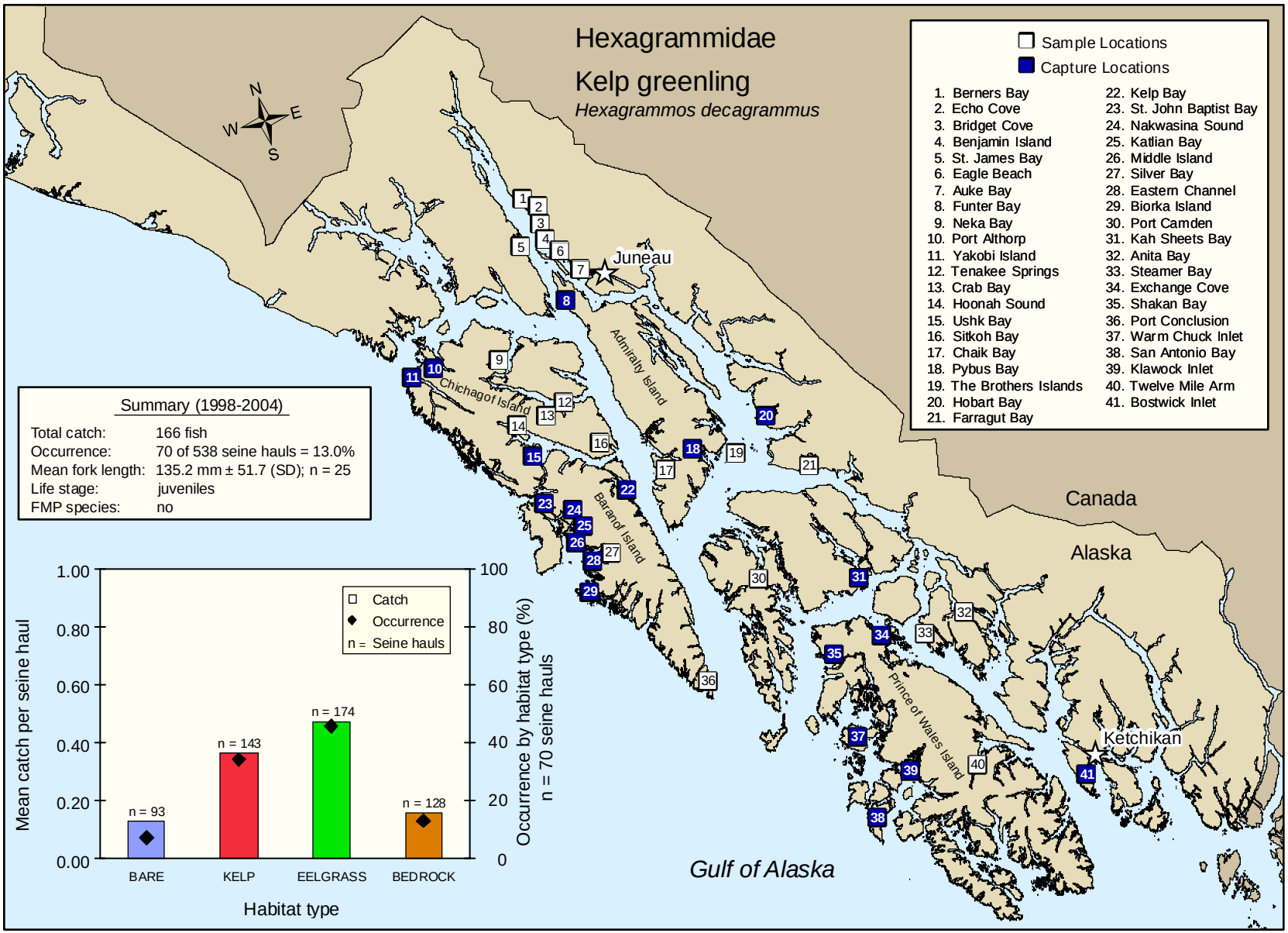

Salmonidae
Dolly Varden
Salvelinus malma
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 364 fish
Occurrence: 59 of 538 seine hauls = 11.0%
Mean fork length: 196.8 mm ± 58.3 (SD); n = 198
Life stage: juveniles
FMP species: no
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 59 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

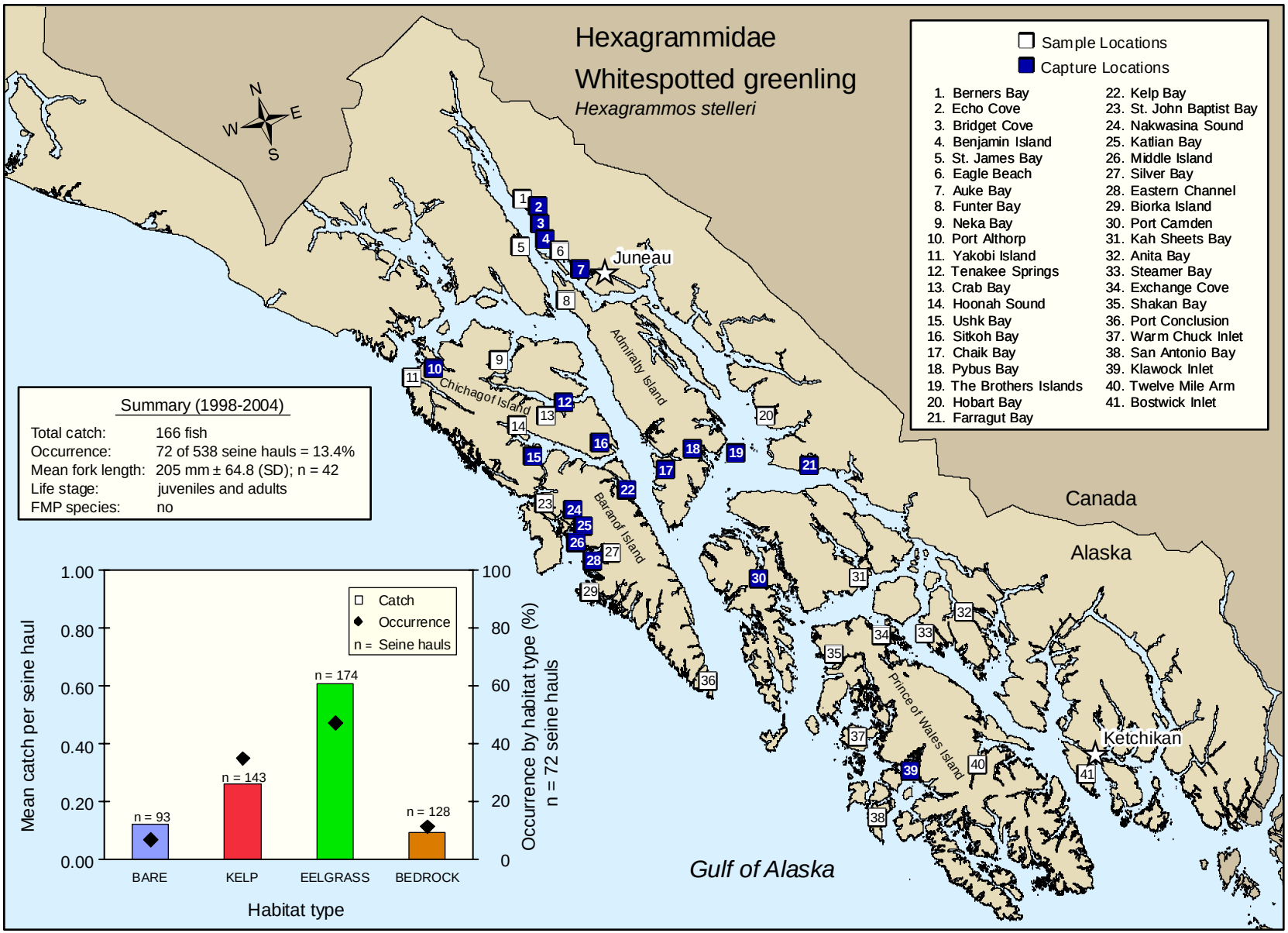

Cottidae
Buffalo sculpin
Enophrys bison
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 300 fish
Occurrence: 102 of 538 seine hauls = 19.0%
Mean fork length: 88.6 mm ± 48.6 (SD); n = 26
Life stage: juveniles
FMP species: no
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
Mean catch per seine haul
Occurrence by habitat type (%)
n = 102 seine hauls
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
S
E
W

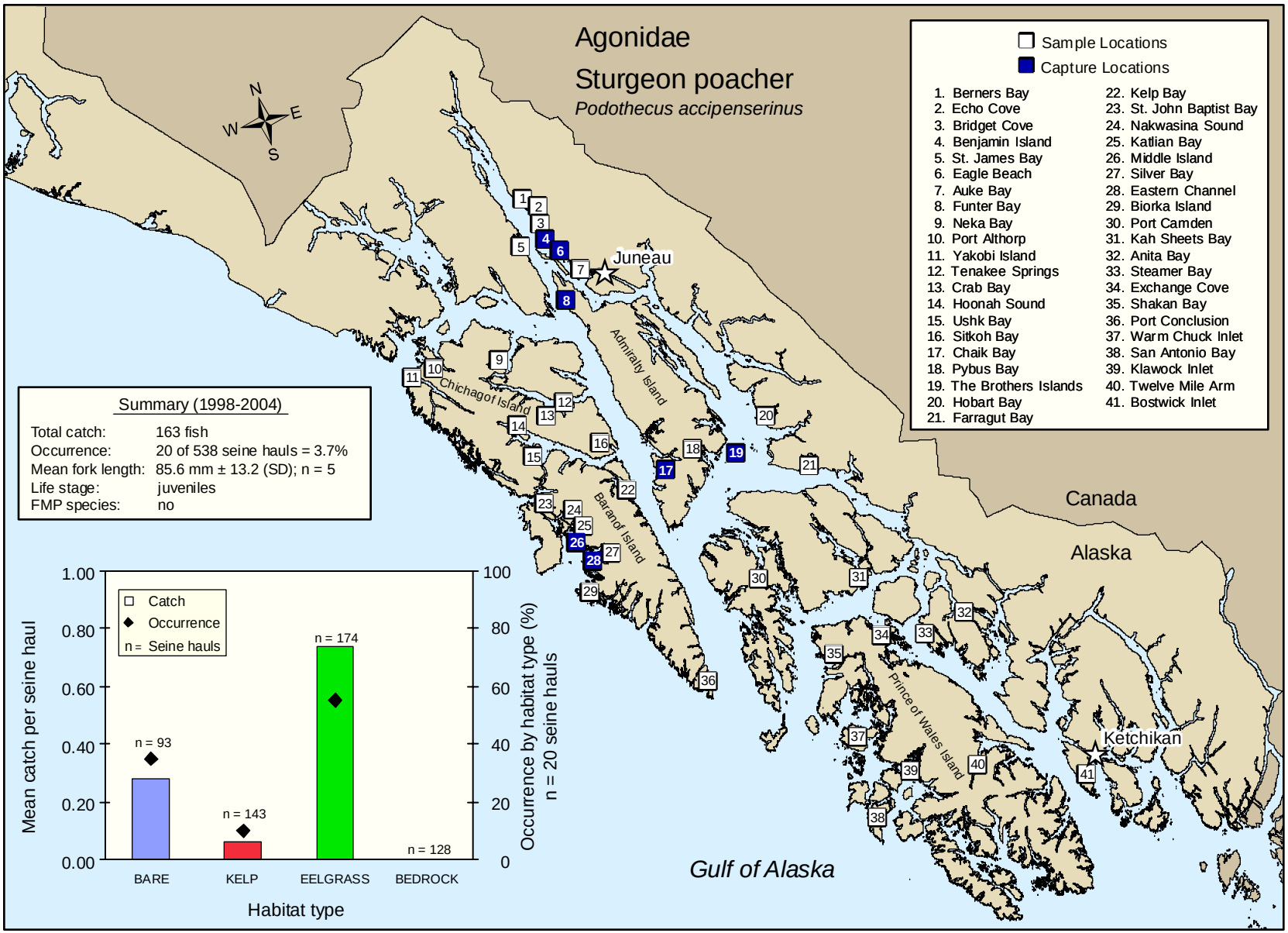

Cottidae
Armorhead sculpin
Gymnocanthus galeatus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 200 fish
Occurrence: 25 of 538 seine hauls = 4.6%
Mean fork length: 82.3 mm ± 16.1 (SD); n = 45
Life stage: juveniles
FMP species: no
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 25 seine hauls

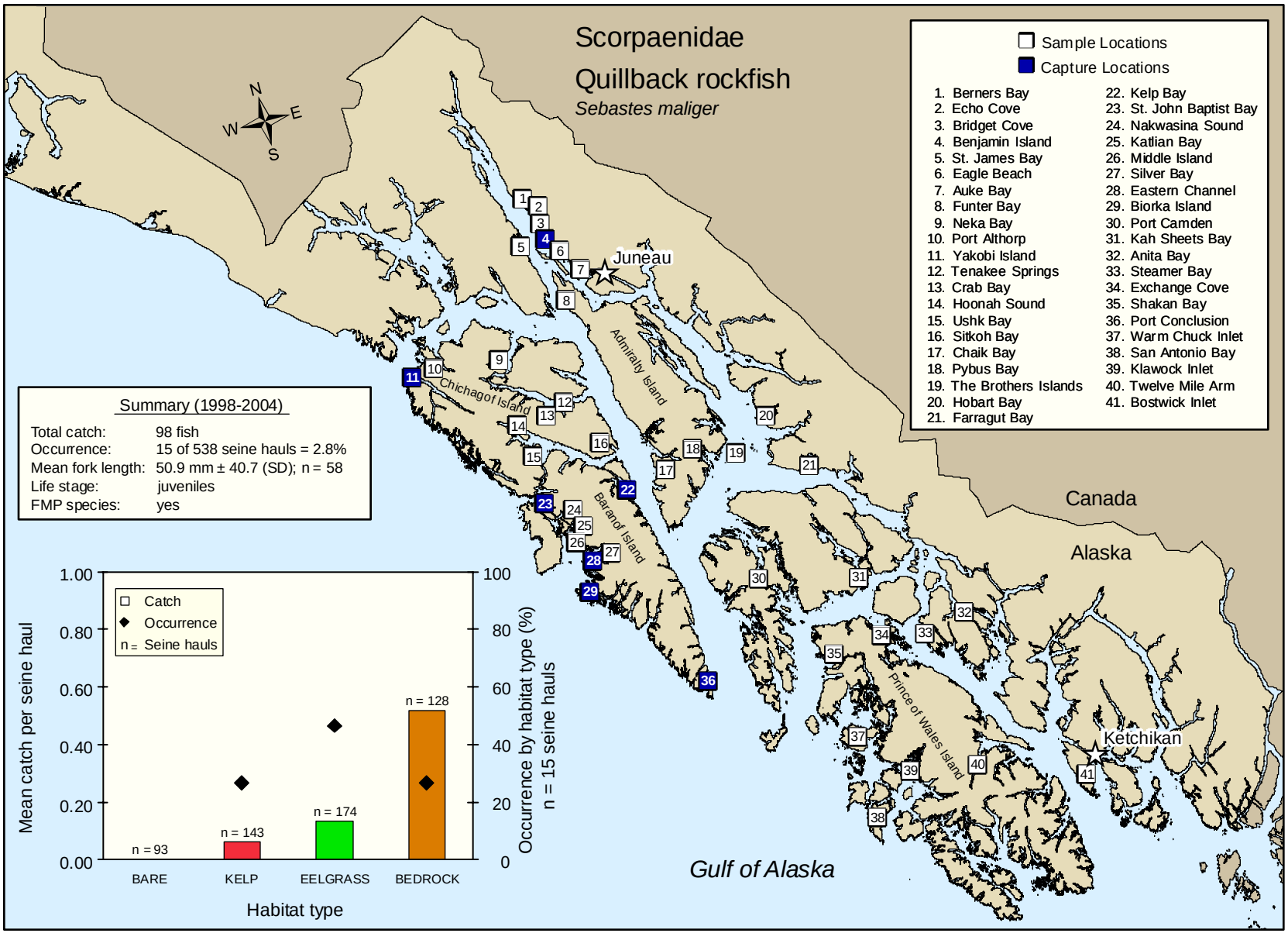

Cottidae
Red Irish lord
Hemilepidotus hemilepidotus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 167 fish
Occurrence: 65 of 538 seine hauls = 12.1%
Mean fork length: 148.6 mm ± 40.6 (SD); n = 10
Life stage: juveniles
FMP species: yes
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 65 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

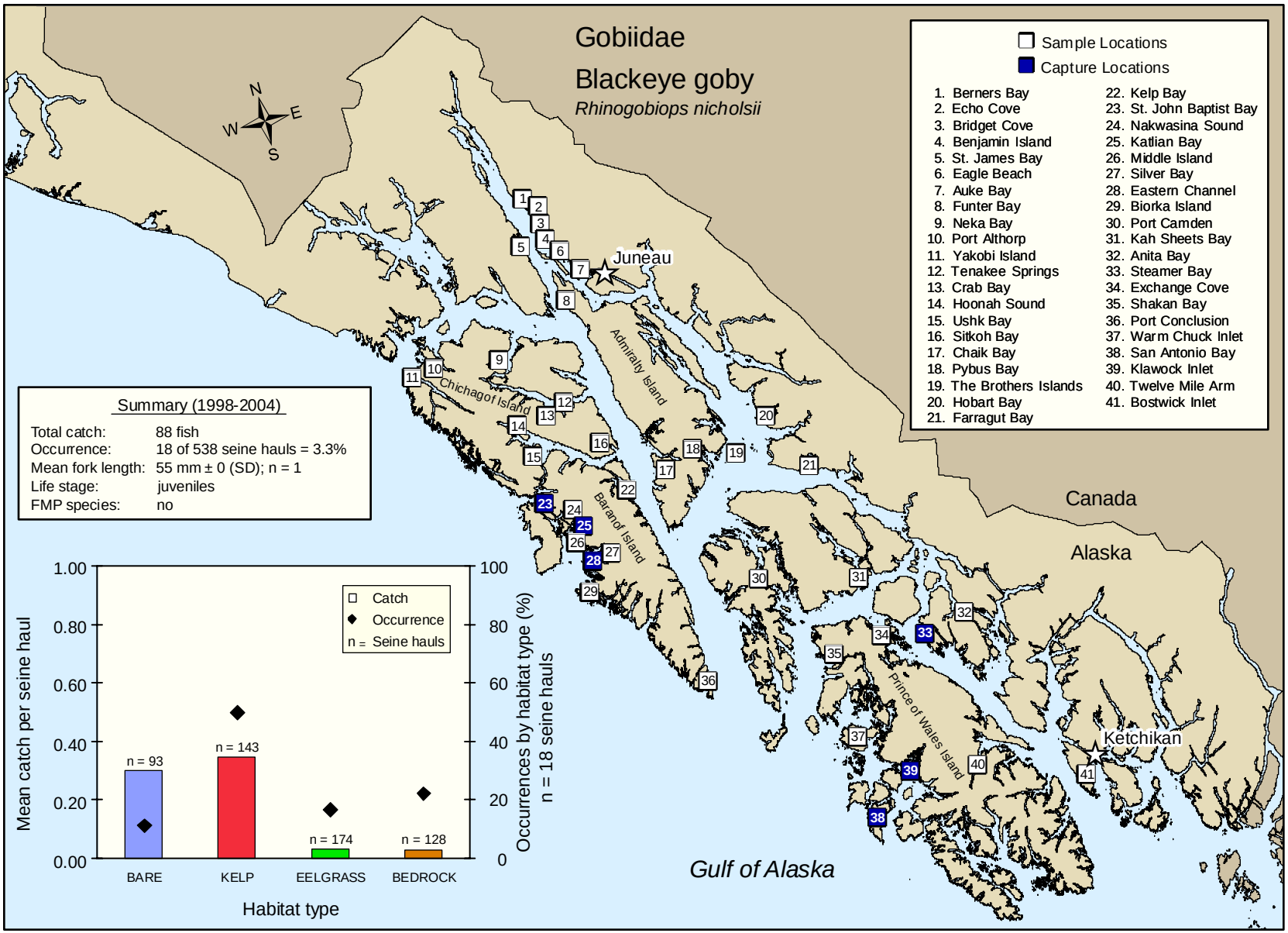

Scorpaenidae
Black rockfish
Sebastes melanops
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 167 fish
Occurrence: 28 of 538 seine hauls = 5.2%
Mean fork length: 119.6 mm ± 46.3 (SD); n = 46
Life stage: juveniles
FMP species: no
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 28 seine hauls
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska

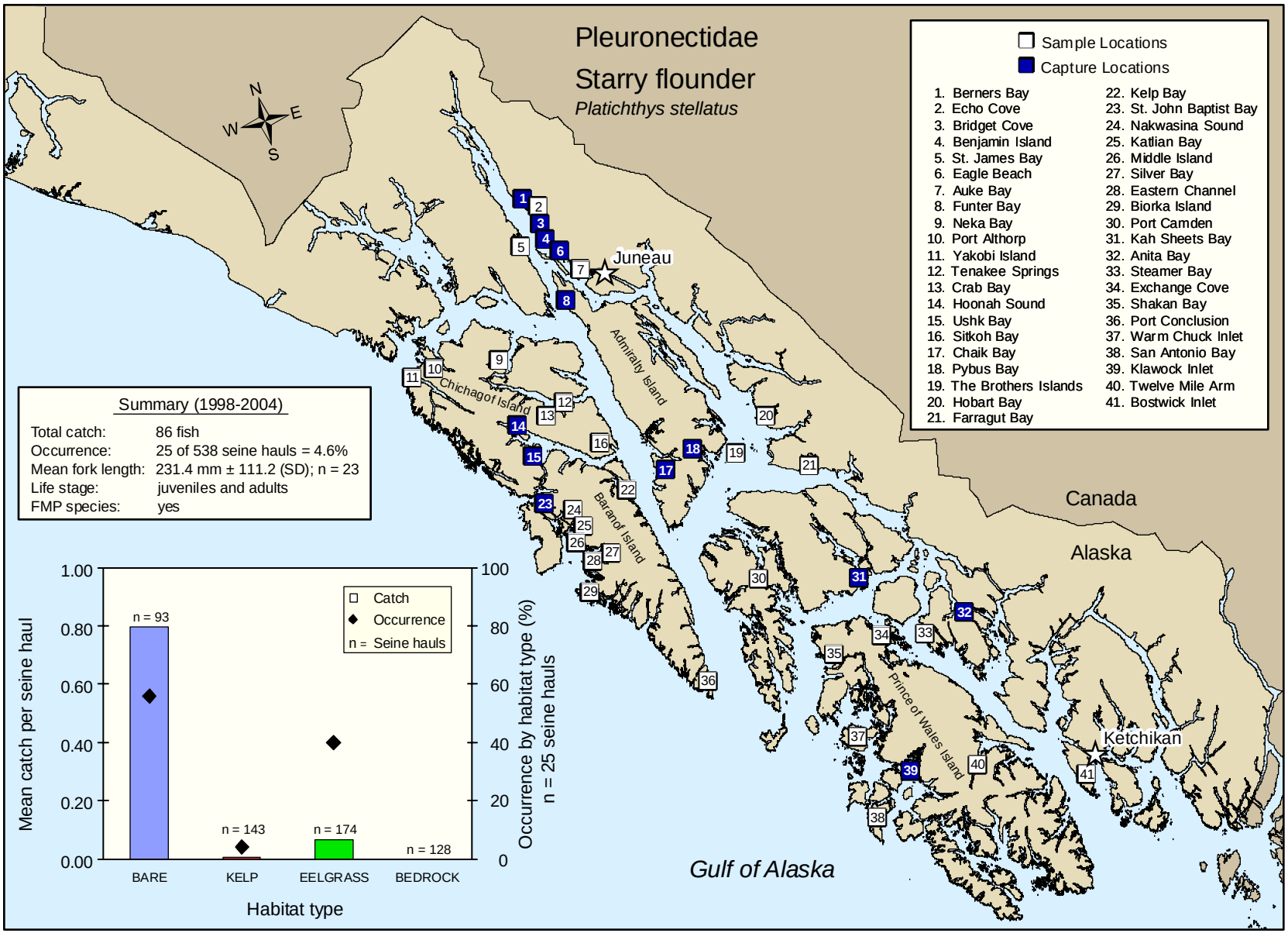

Hexagrammidae
Kelp greenling
Hexagrammos decagrammus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 166 fish
Occurrence: 70 of 538 seine hauls = 13.0%
Mean fork length: 135.2 mm ± 51.7 (SD); n = 25
Life stage: juveniles
FMP species: no
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 70 seine hauls
1.00
0.80
0.60
0.40
0.20
0.00
100
80
60
40
20
0

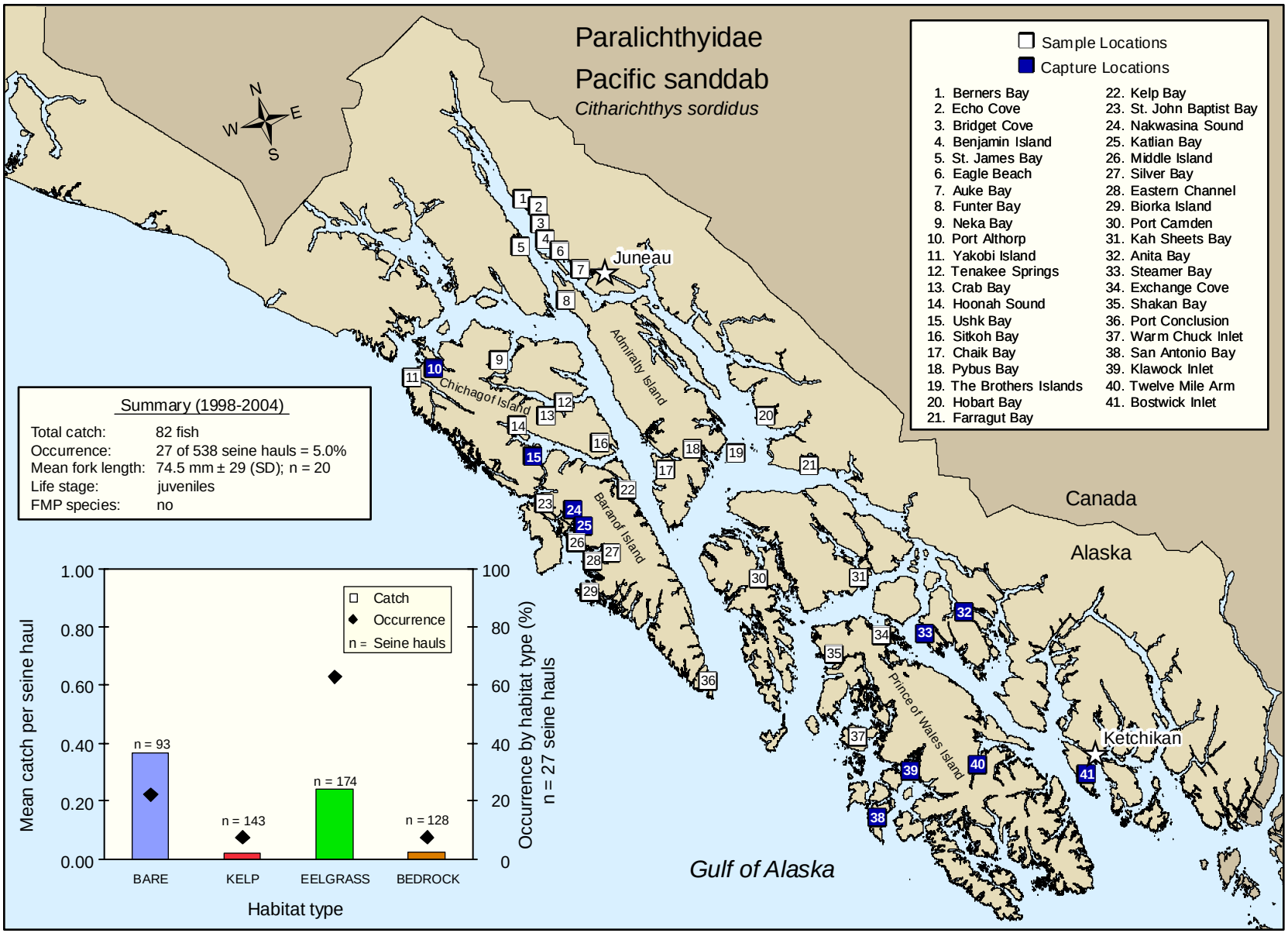

Hexagrammidae
Whitespotted greenling
Hexagrammos stelleri
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 166 fish
Occurrence: 72 of 538 seine hauls = 13.4%
Mean fork length: 205 mm ± 64.8 (SD); n = 42
Life stage: juveniles and adults
FMP species: no
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
Mean catch per seine haul
Occurrence by habitat type (%)
n = 72 seine hauls
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
S
E
W

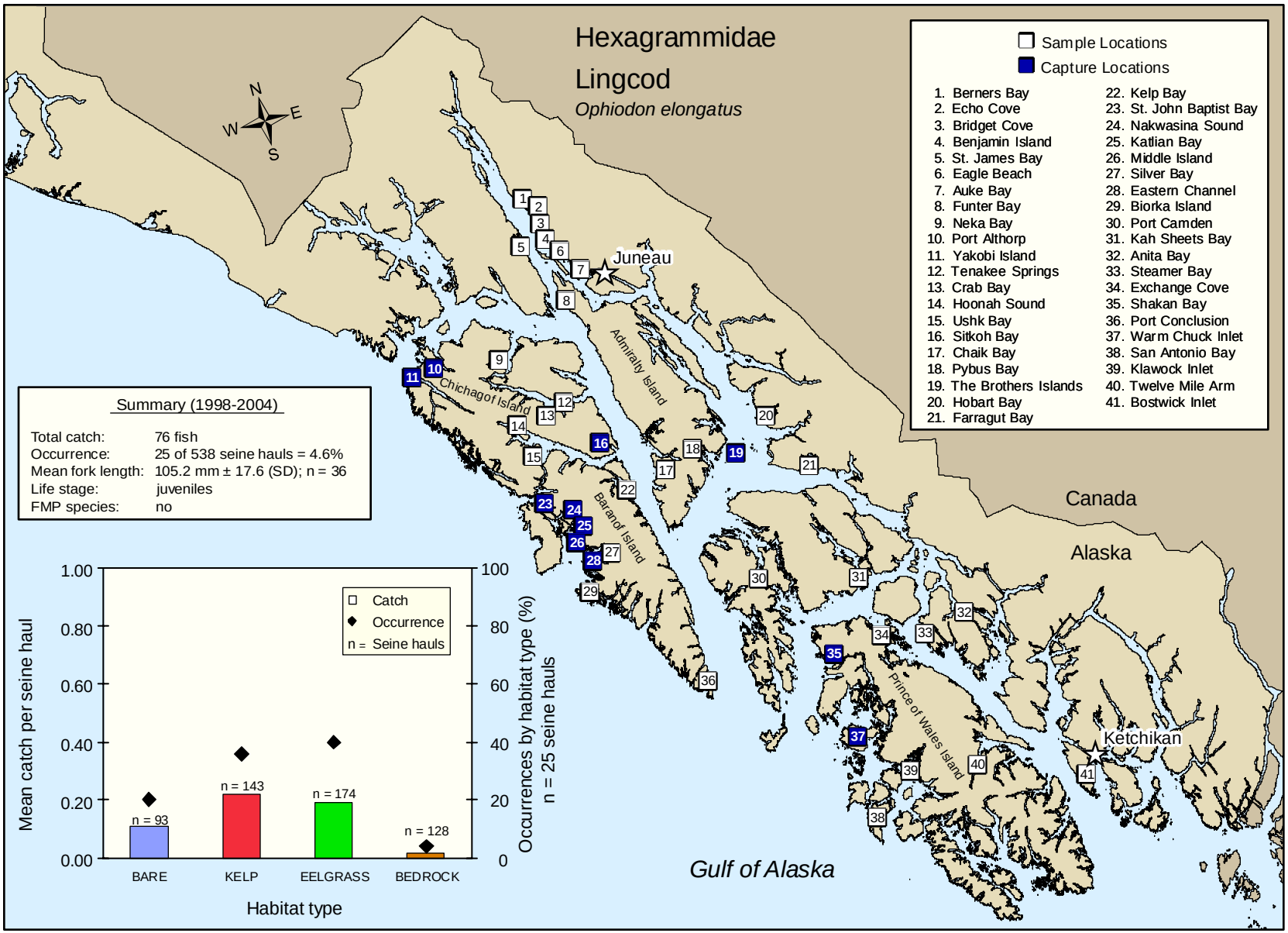

Agonidae
Sturgeon poacher
Podothecus accipenserinus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 163 fish
Occurrence: 20 of 538 seine hauls = 3.7%
Mean fork length: 85.6 mm ± 13.2 (SD); n = 5
Life stage: juveniles
FMP species: no
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
S
E
W
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrence by habitat type (%)
n = 20 seine hauls
1.00
0.80
0.60
0.40
0.20
0.00
100
80
60
40
20
0

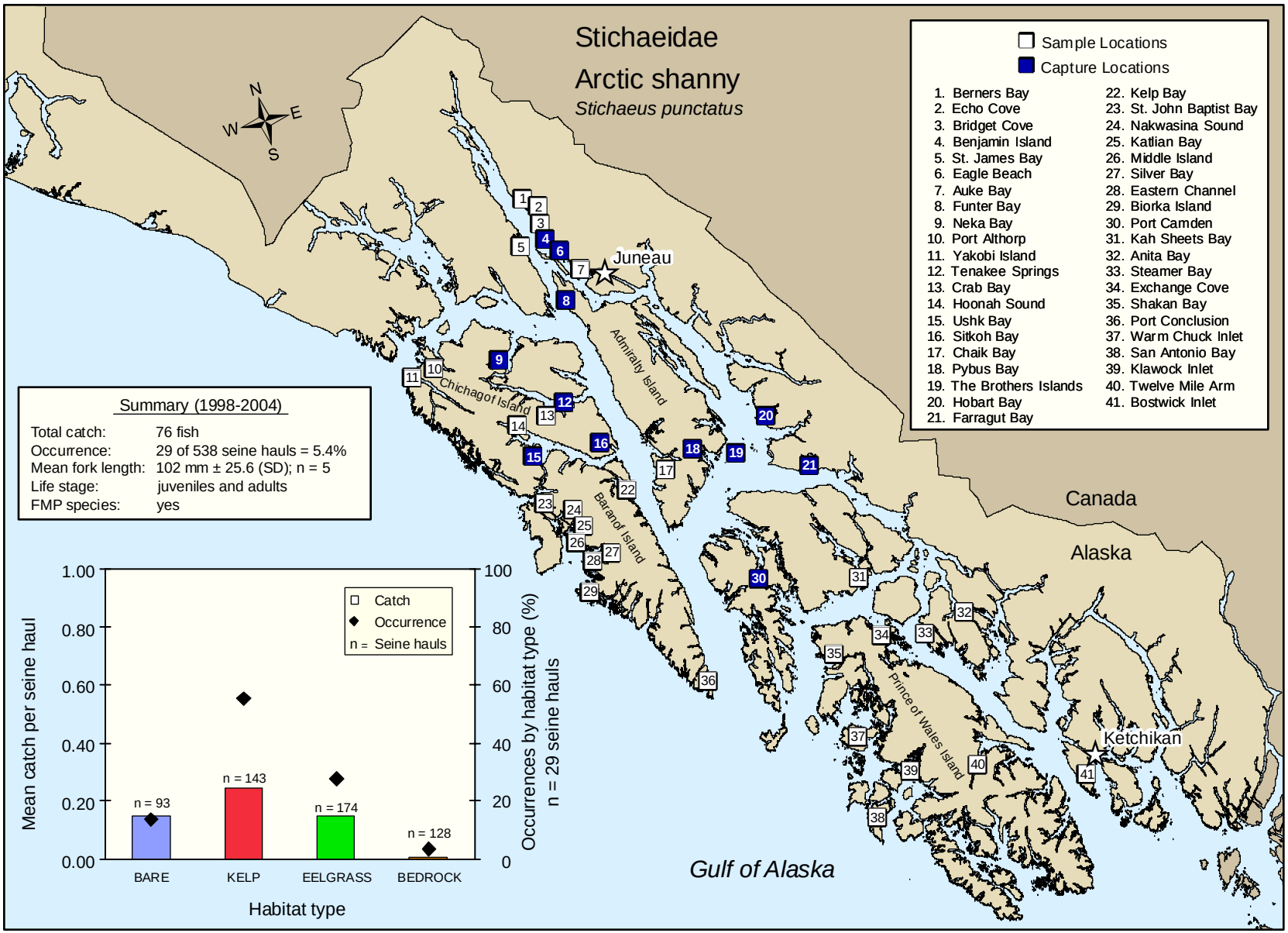

Scorpaenidae
Quillback rockfish
Sebastes maliger
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 98 fish
Occurrence: 15 of 538 seine hauls = 2.8%
Mean fork length: 50.9 mm ± 40.7 (SD); n = 58
Life stage: juveniles
FMP species: yes
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 15 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

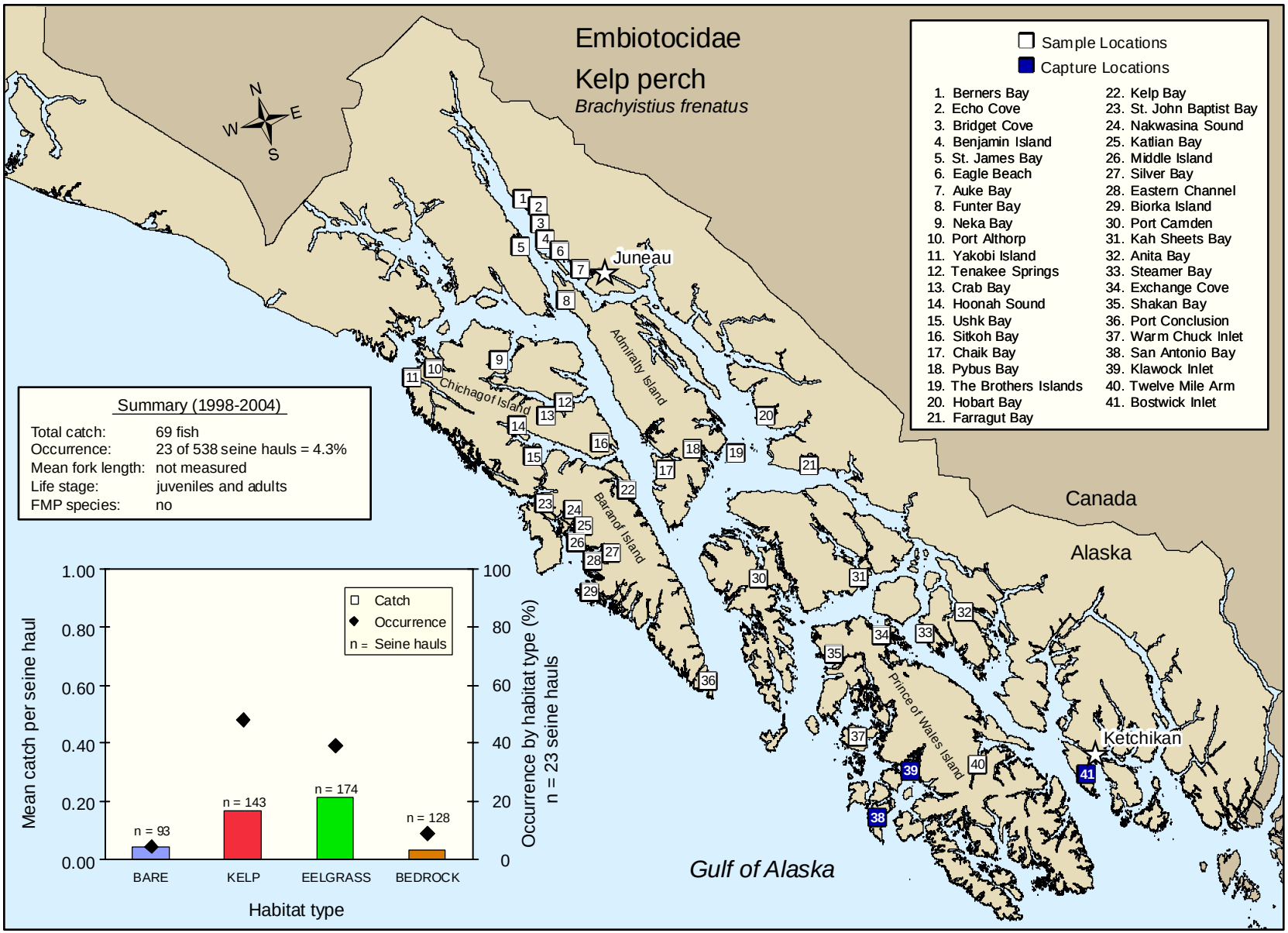

Gobiidae
Blackeye goby
Rhinogobiops nicholsii
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 88 fish
Occurrence: 18 of 538 seine hauls = 3.3%
Mean fork length: 55 mm ± 0 (SD); n = 1
Life stage: juveniles
FMP species: no
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 18 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

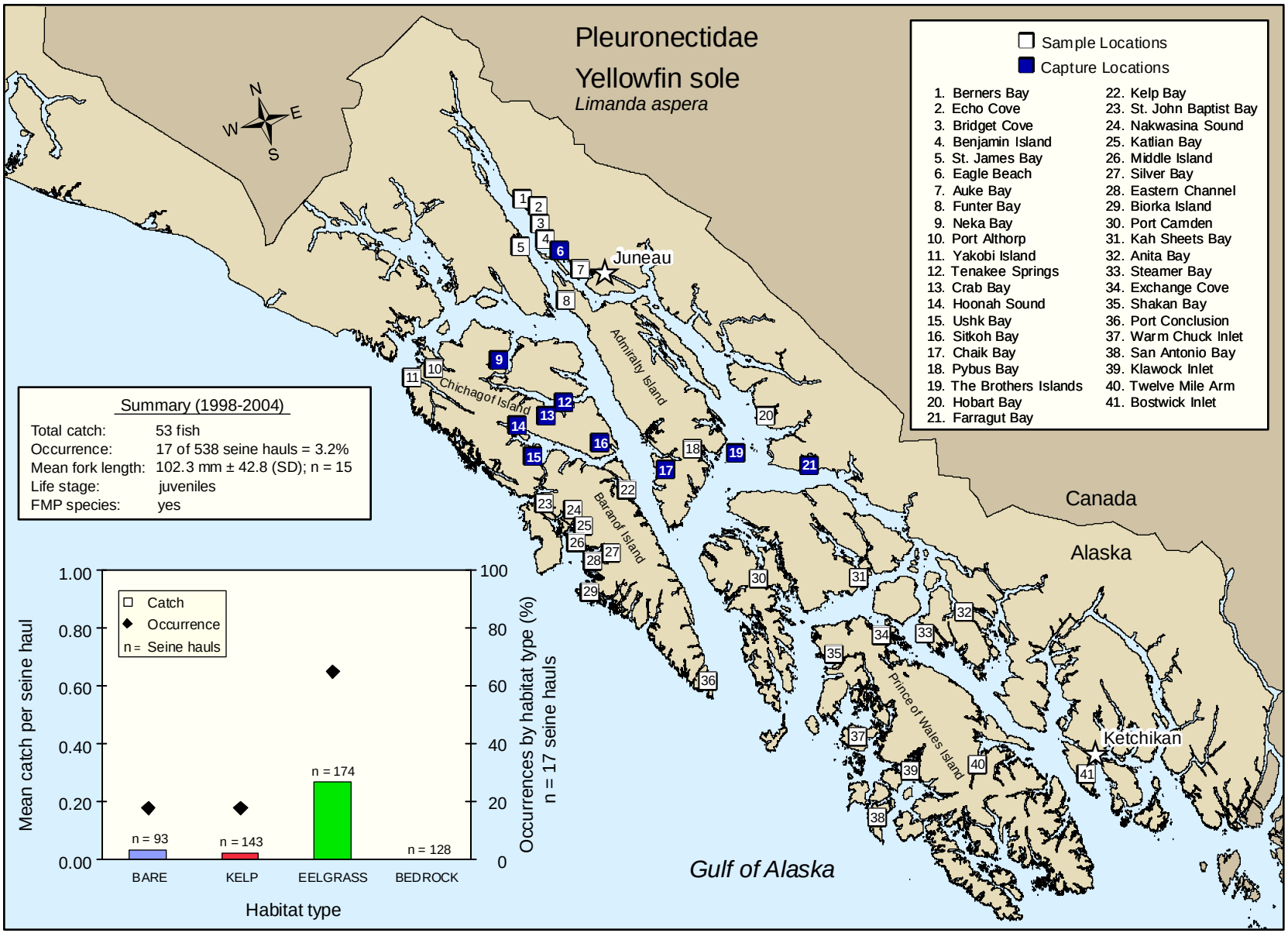

Pleuronectidae
Starry flounder
Platichthys stellatus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
E
S
W
Summary (1998-2004)
Total catch: 86 fish
Occurrence: 25 of 538 seine hauls = 4.6%
Mean fork length: 231.4 mm ± 111.2 (SD); n = 23
Life stage: juveniles and adults
FMP species: yes
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
Mean catch per seine haul
Occurrence by habitat type (%)
n = 25 seine hauls
1.00
0.80
0.60
0.40
0.20
0.00
100
80
60
40
20
0
BARE
KELP
EELGRASS
BEDROCK
Habitat type

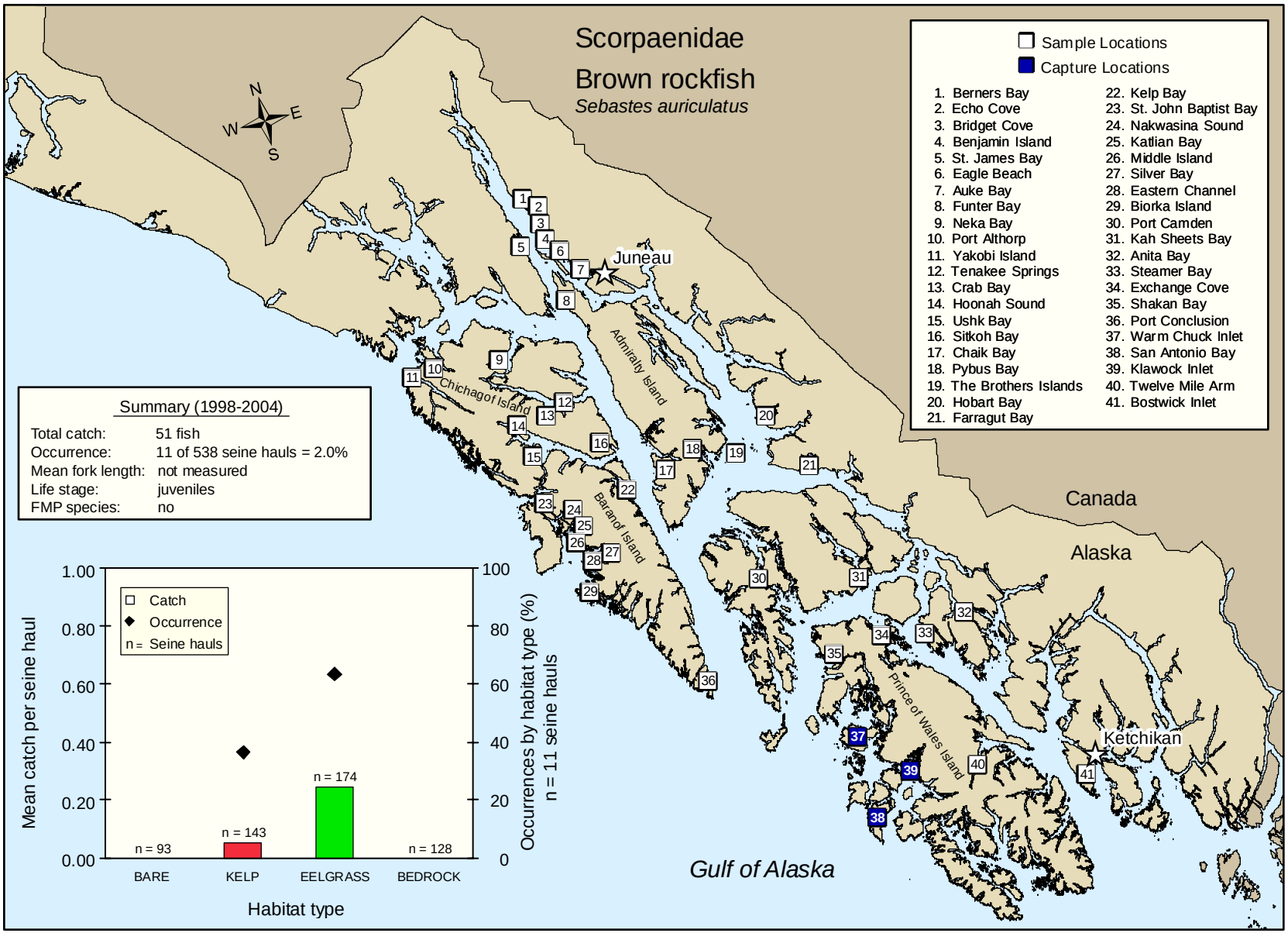

Paralichthyidae
Pacific sanddab
Citharichthys sordidus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 82 fish
Occurrence: 27 of 538 seine hauls = 5.0%
Mean fork length: 74.5 mm ± 29 (SD); n = 20
Life stage: juveniles
FMP species: no
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 27 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

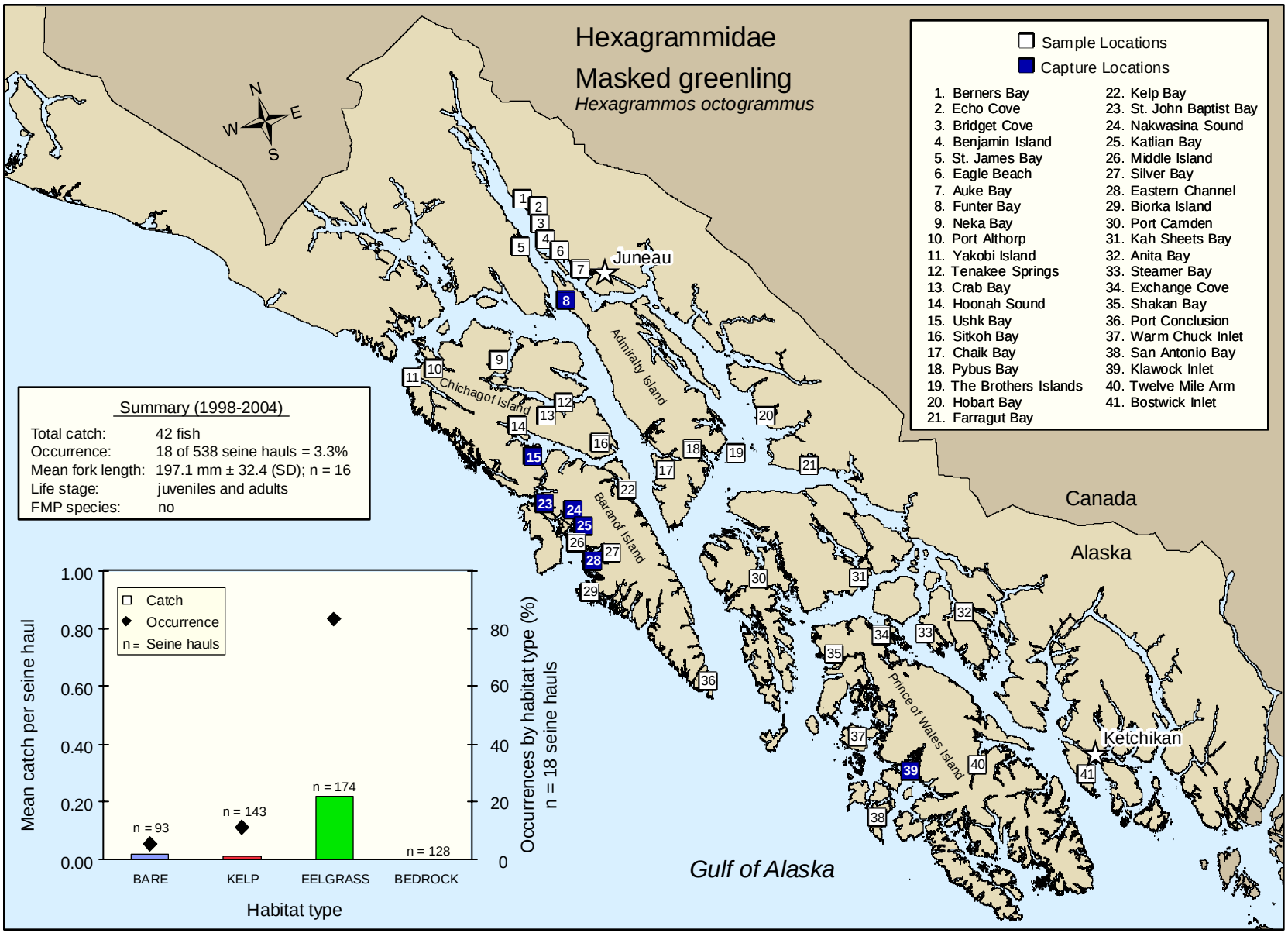

Hexagrammidae
Lingcod
Ophiodon elongatus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 76 fish
Occurrence: 25 of 538 seine hauls = 4.6%
Mean fork length: 105.2 mm ± 17.6 (SD); n = 36
Life stage: juveniles
FMP species: no
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 25 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

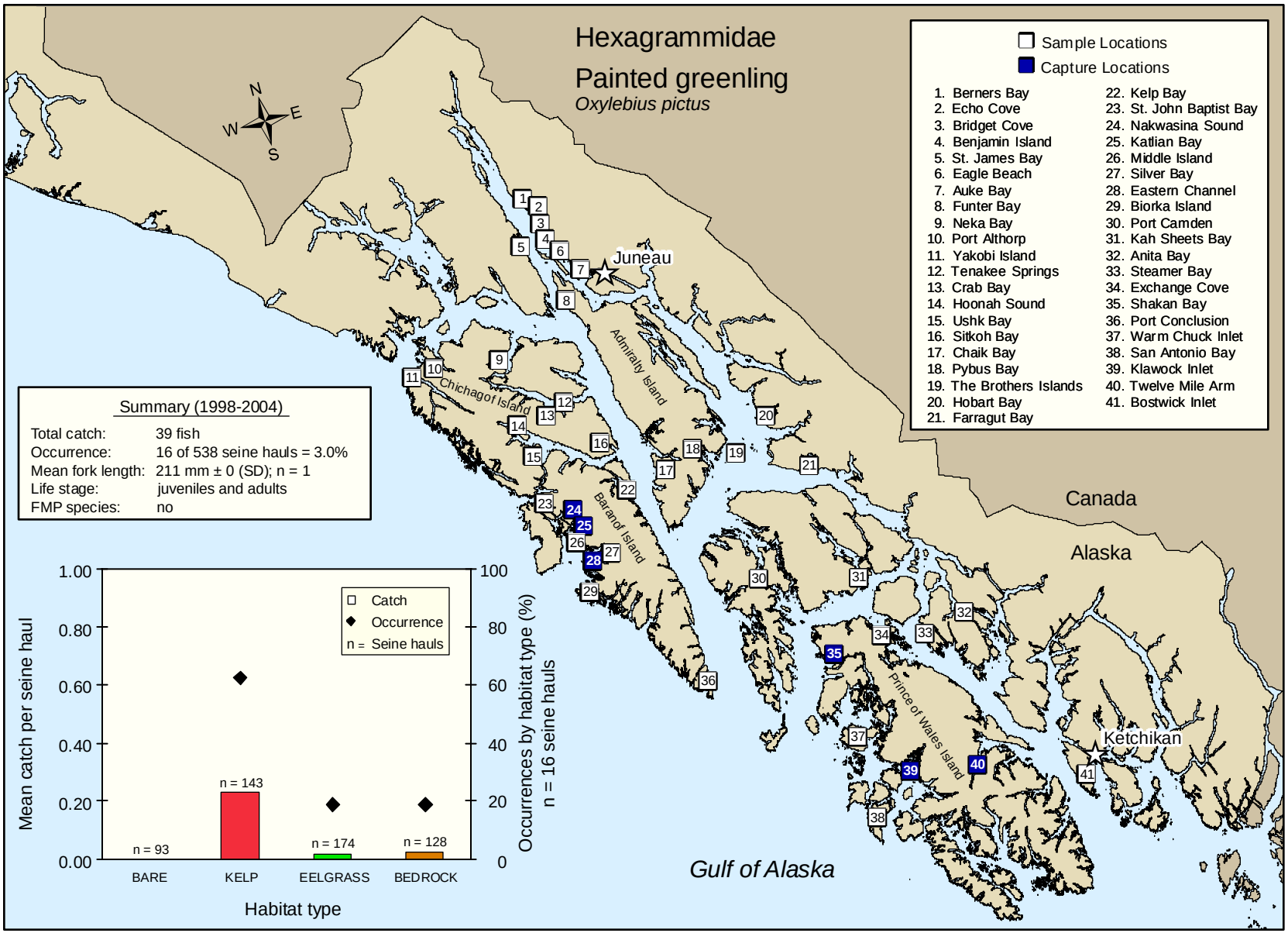

Stichaeidae
Arctic shanny
Stichaeus punctatus
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Ketchikan
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 76 fish
Occurrence: 29 of 538 seine hauls = 5.4%
Mean fork length: 102 mm ± 25.6 (SD); n = 5
Life stage: juveniles and adults
FMP species: yes
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 29 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

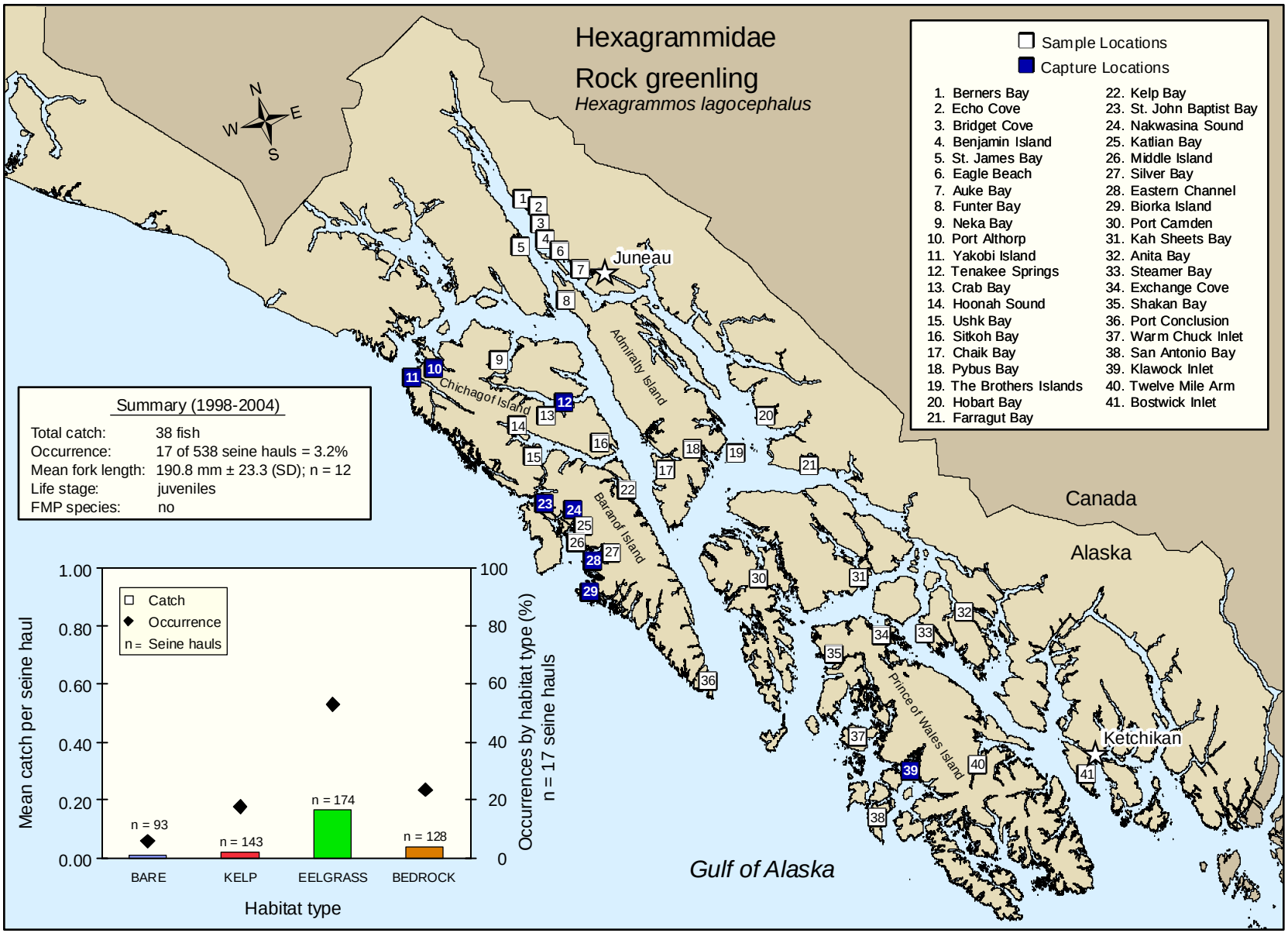

Embiotocidae
Kelp perch
Brachyistius frenatus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 69 fish
Occurrence: 23 of 538 seine hauls = 4.3%
Mean fork length: not measured
Life stage: juveniles and adults
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrence by habitat type (%)
n = 23 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

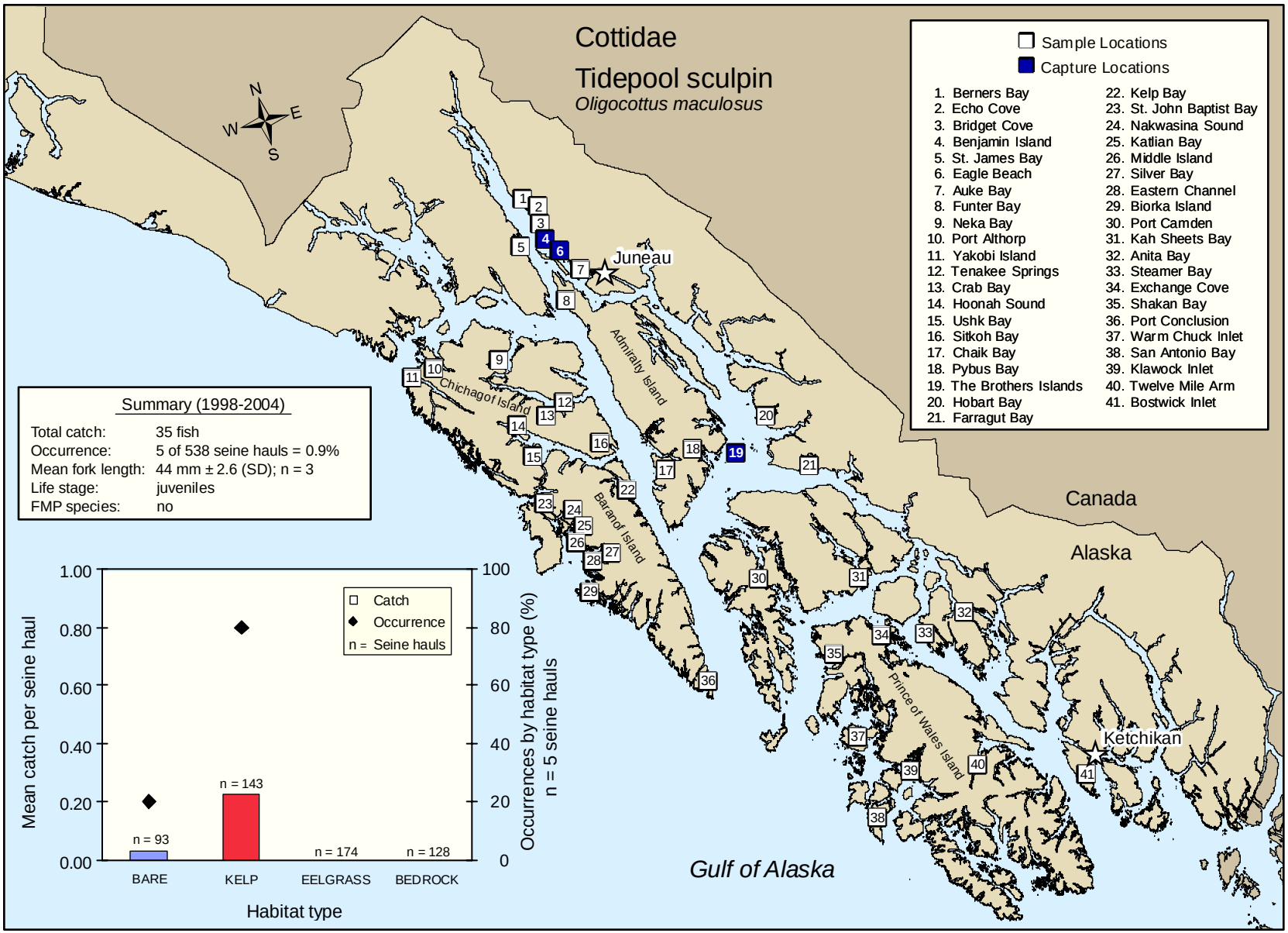

Pleuronectidae
Yellowfin sole
Limanda aspera
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 53 fish
Occurrence: 17 of 538 seine hauls = 3.2%
Mean fork length: 102.3 mm ± 42.8 (SD); n = 15
Life stage: juveniles
FMP species: yes
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 17 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

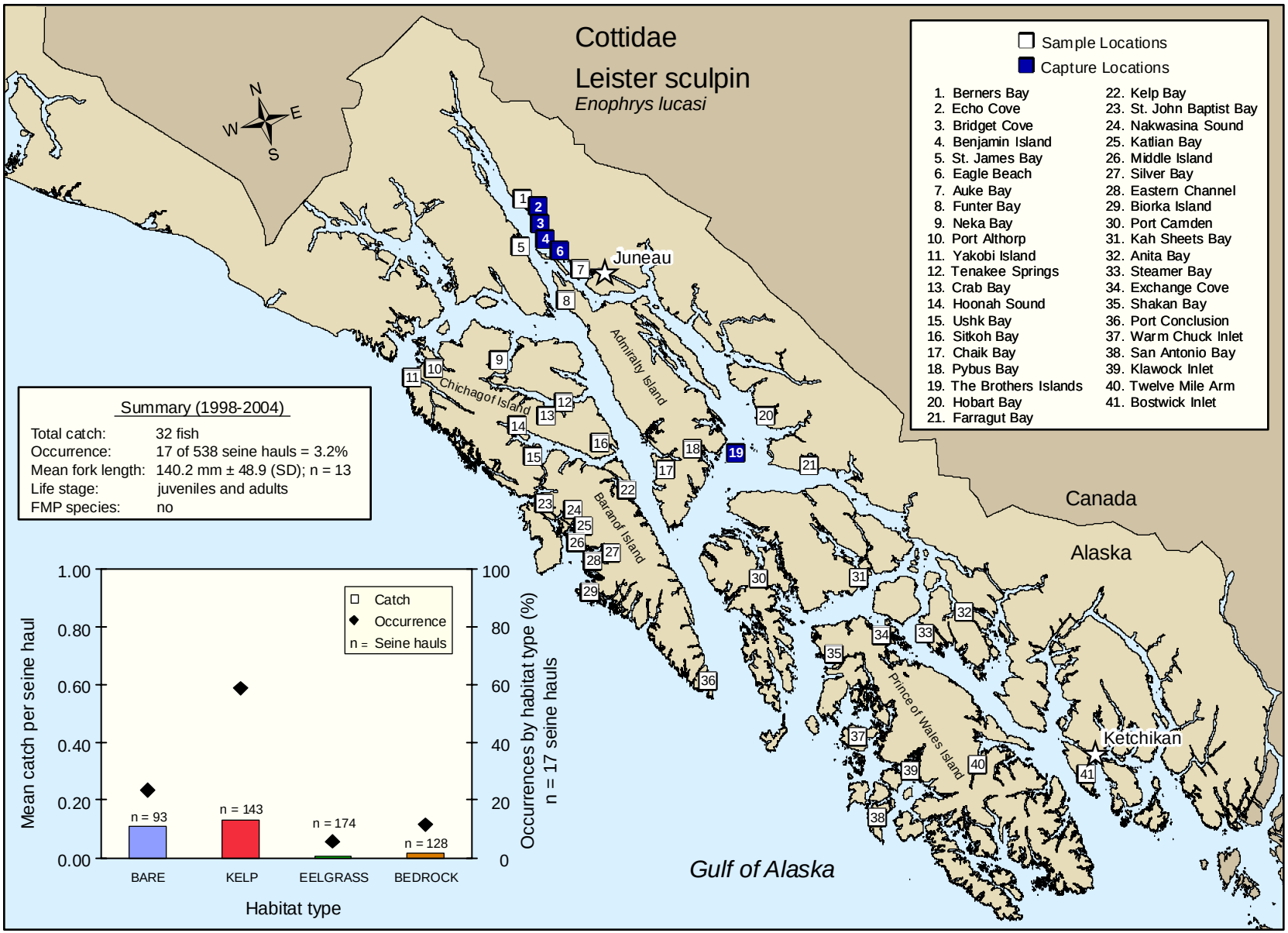

Scorpaenidae
Brown rockfish
Sebastes auriculatus
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Ketchikan
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 51 fish
Occurrence: 11 of 538 seine hauls = 2.0%
Mean fork length: not measured
Life stage: juveniles
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 11 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

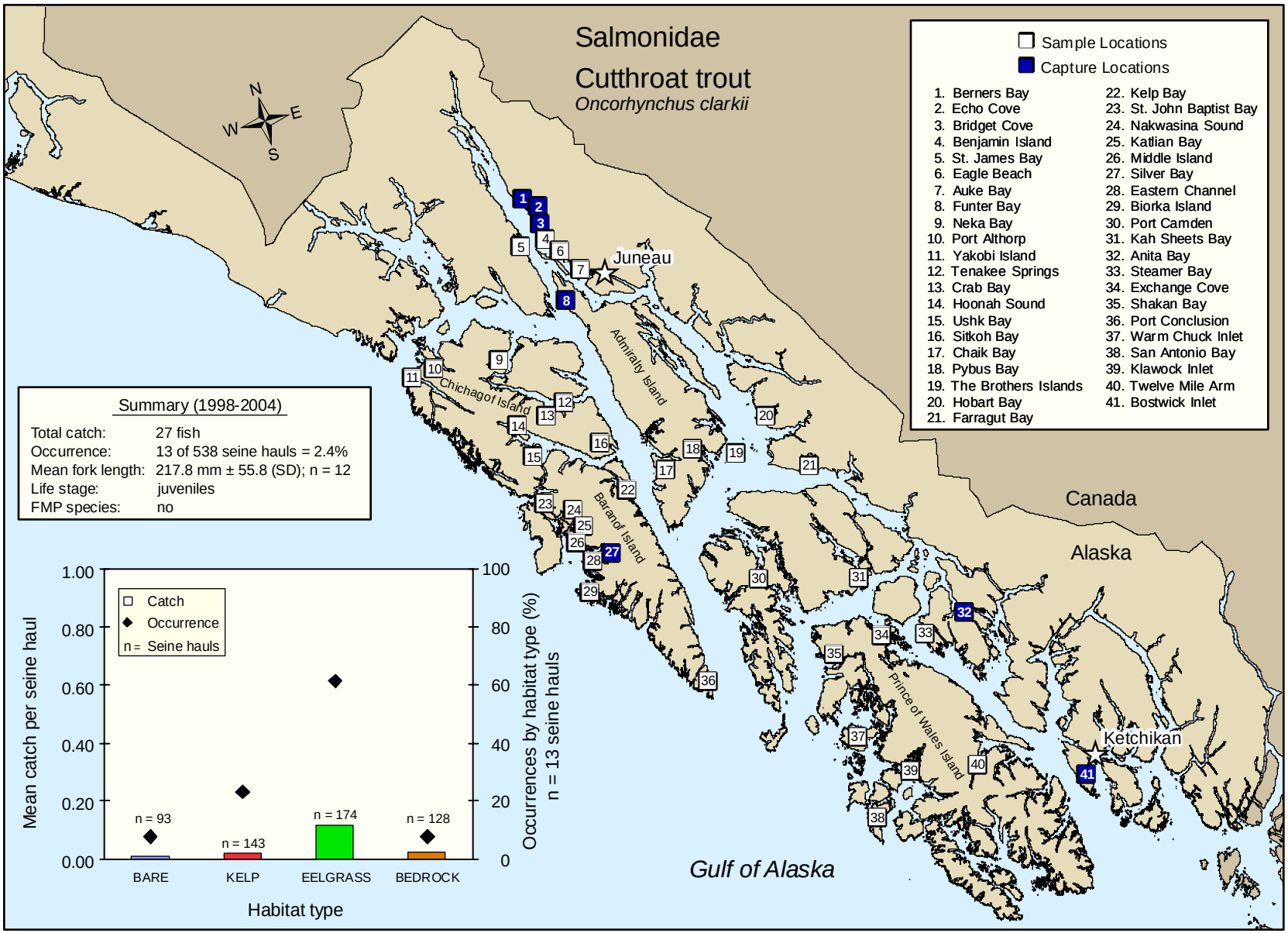

Hexagrammidae
Masked greenling
Hexagrammos octogrammus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 42 fish
Occurrence: 18 of 538 seine hauls = 3.3%
Mean fork length: 197.1 mm ± 32.4 (SD); n = 16
Life stage: juveniles and adults
FMP species: no
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
S
E
W
Catch
Occurrence
n = Seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Mean catch per seine haul
Occurrences by habitat type (%)
n = 18 seine hauls
1.00
0.80
0.60
0.40
0.20
0.00
80
60
40
20
0

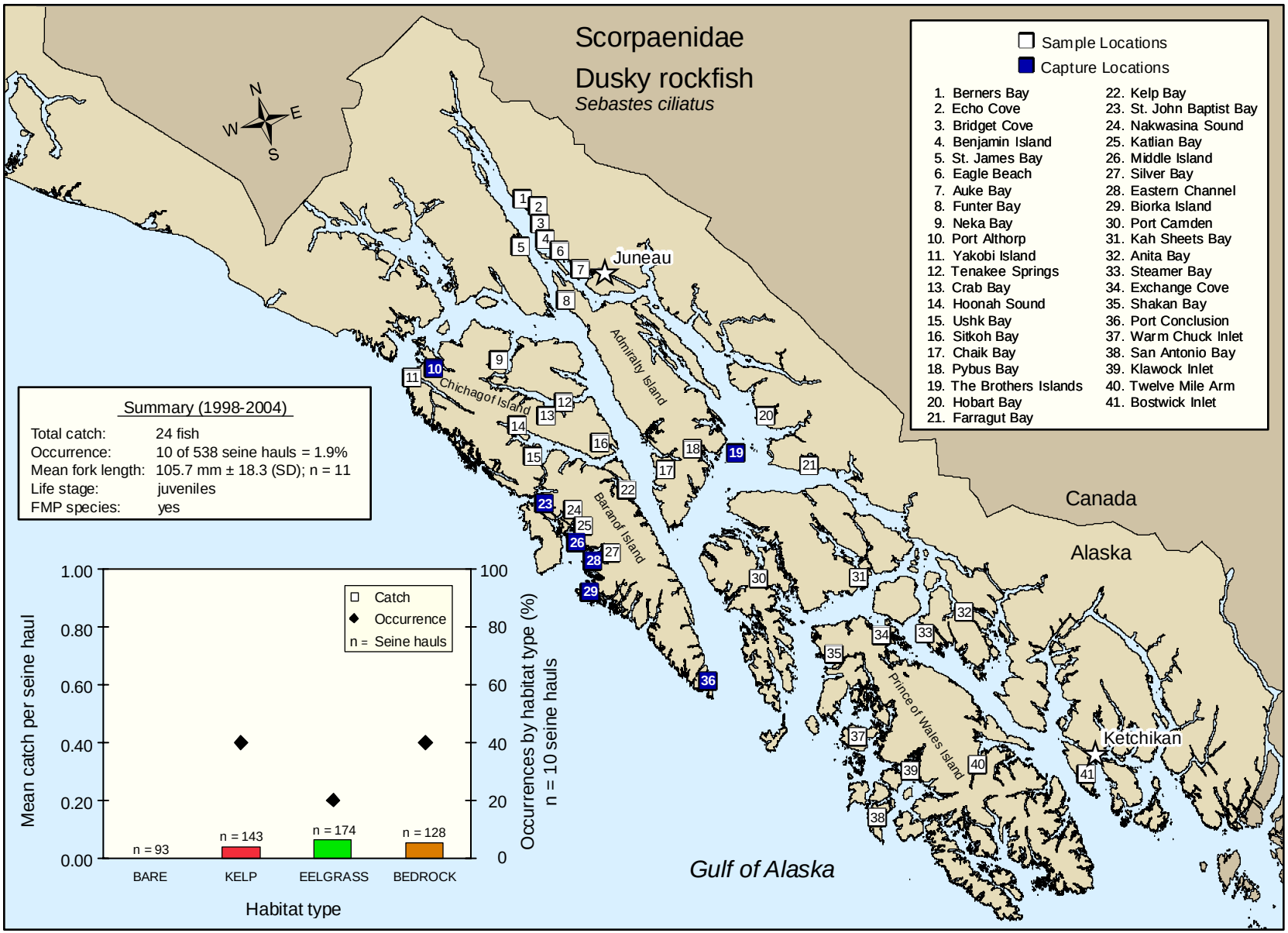

Hexagrammidae
Painted greenling
Oxylebius pictus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 39 fish
Occurrence: 16 of 538 seine hauls = 3.0%
Mean fork length: 211 mm ± 0 (SD); n = 1
Life stage: juveniles and adults
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 16 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

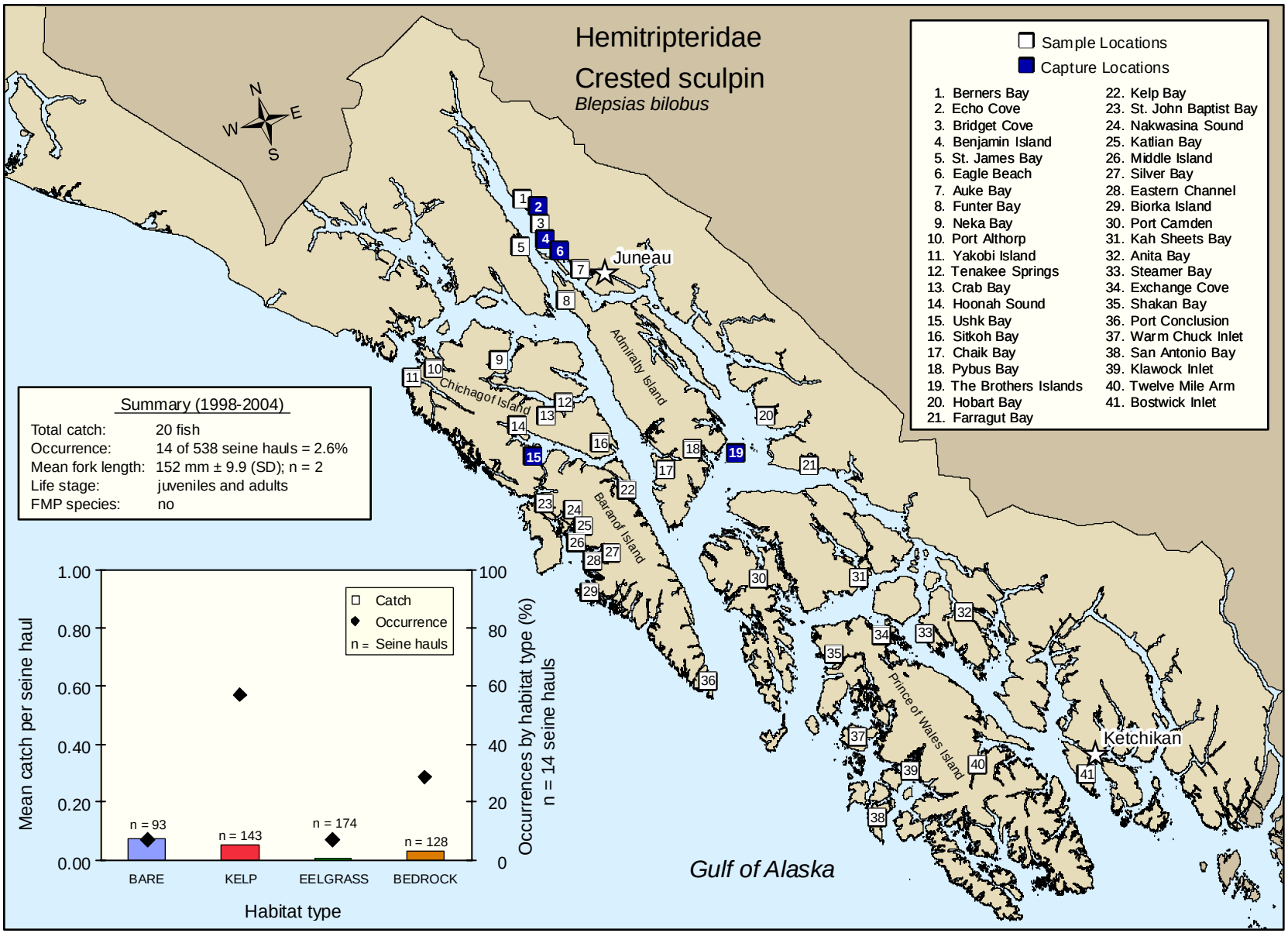

Hexagrammidae
Rock greenling
Hexagrammos lagocephalus
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Ketchikan
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 38 fish
Occurrence: 17 of 538 seine hauls = 3.2%
Mean fork length: 190.8 mm ± 23.3 (SD); n = 12
Life stage: juveniles
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 17 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

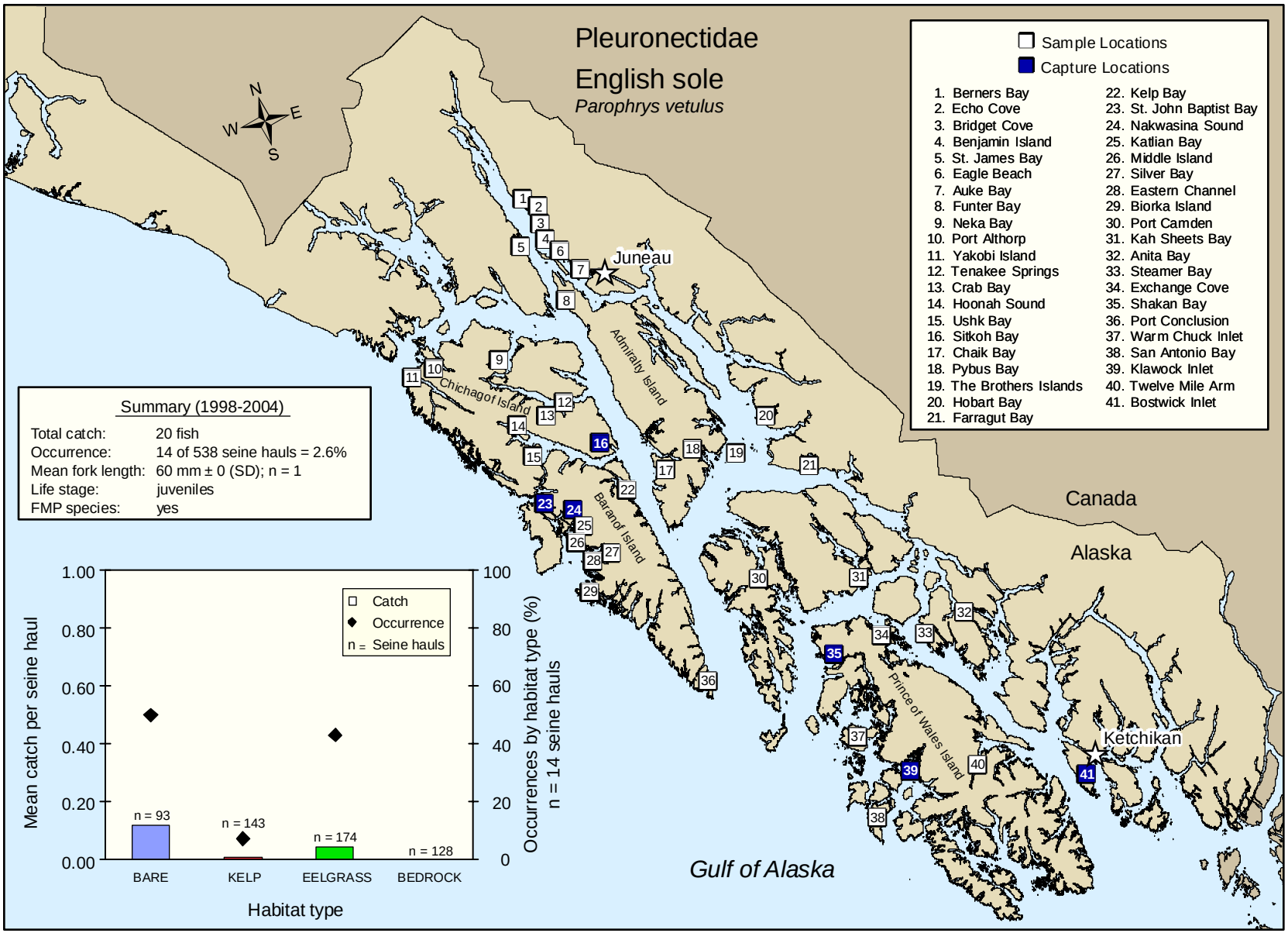

Cottidae
Tidepool sculpin
Oligocottus maculosus
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Ketchikan
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 35 fish
Occurrence: 5 of 538 seine hauls = 0.9%
Mean fork length: 44 mm ± 2.6 (SD); n = 3
Life stage: juveniles
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 5 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type

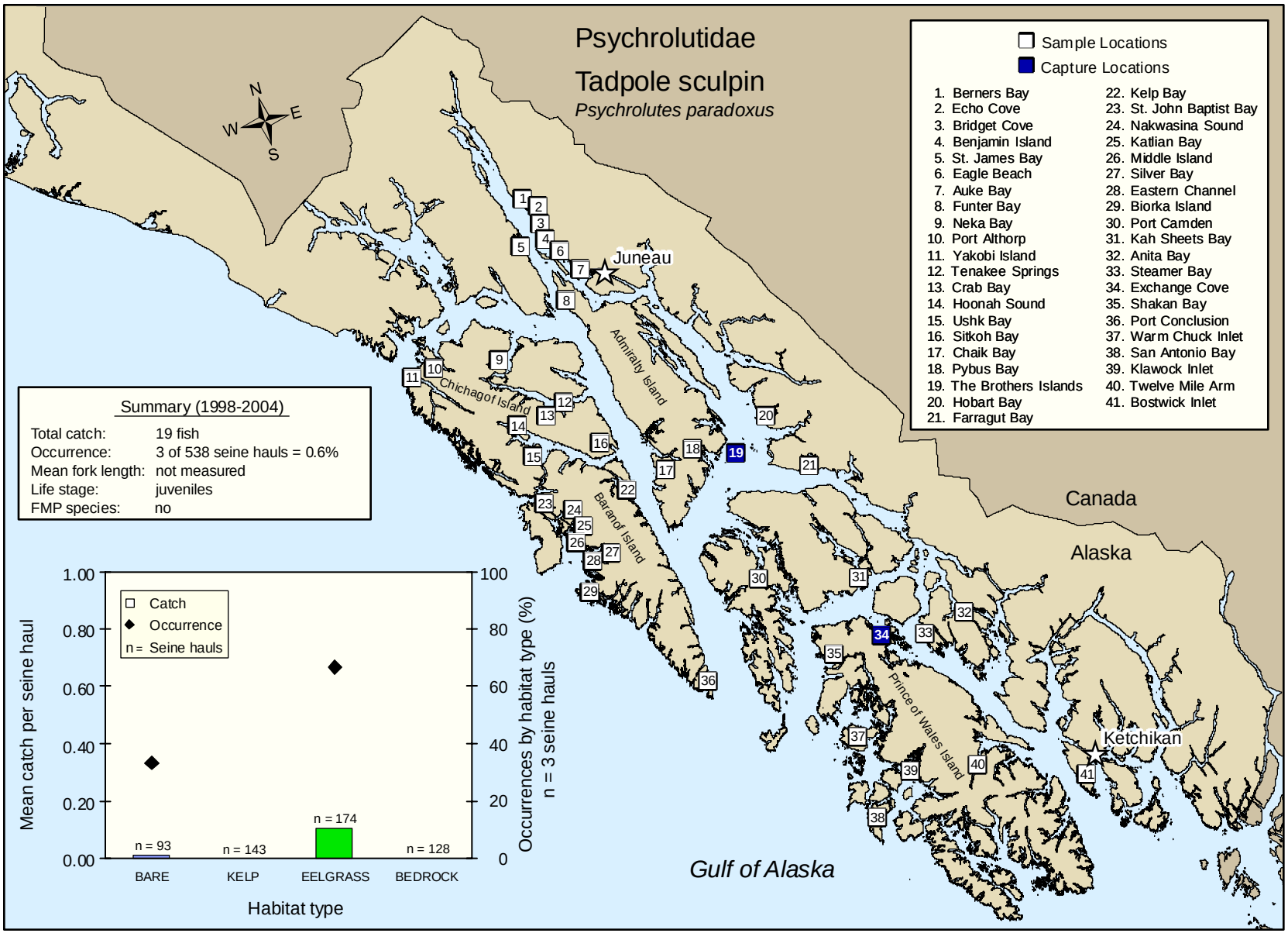

Cottidae
Leister sculpin
Enophrys lucasi
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 32 fish
Occurrence: 17 of 538 seine hauls = 3.2%
Mean fork length: 140.2 mm ± 48.9 (SD); n = 13
Life stage: juveniles and adults
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 17 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska


Salmonidae
Cutthroat trout
Oncorhynchus clarkii
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 27 fish
Occurrence: 13 of 538 seine hauls = 2.4%
Mean fork length: 217.8 mm ± 55.8 (SD); n = 12
Life stage: juveniles
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 13 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type


Scorpaenidae
Dusky rockfish
Sebastes ciliatus
N
W
E
S
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Summary (1998-2004)
Total catch: 24 fish
Occurrence: 10 of 538 seine hauls = 1.9%
Mean fork length: 105.7 mm ± 18.3 (SD); n = 11
Life stage: juveniles
FMP species: yes
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 10 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type


Hemitripteridae
Crested sculpin
Blepsias bilobus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Gulf of Alaska
Summary (1998-2004)
Total catch: 20 fish
Occurrence: 14 of 538 seine hauls = 2.6%
Mean fork length: 152 mm ± 9.9 (SD); n = 2
Life stage: juveniles and adults
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 14 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type


Pleuronectidae
English sole
Parophrys vetulus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 20 fish
Occurrence: 14 of 538 seine hauls = 2.6%
Mean fork length: 60 mm ± 0 (SD); n = 1
Life stage: juveniles
FMP species: yes
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 14 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type


Psychrolutidae
Tadpole sculpin
Psychrolutes paradoxus
Sample Locations
Capture Locations
1. Berners Bay
2. Echo Cove
3. Bridget Cove
4. Benjamin Island
5. St. James Bay
6. Eagle Beach
7. Auke Bay
8. Funter Bay
9. Neka Bay
10. Port Althorp
11. Yakobi Island
12. Tenakee Springs
13. Crab Bay
14. Hoonah Sound
15. Ushk Bay
16. Sitkoh Bay
17. Chaik Bay
18. Pybus Bay
19. The Brothers Islands
20. Hobart Bay
21. Farragut Bay
22. Kelp Bay
23. St. John Baptist Bay
24. Nakwasina Sound
25. Katlian Bay
26. Middle Island
27. Silver Bay
28. Eastern Channel
29. Biorka Island
30. Port Camden
31. Kah Sheets Bay
32. Anita Bay
33. Steamer Bay
34. Exchange Cove
35. Shakan Bay
36. Port Conclusion
37. Warm Chuck Inlet
38. San Antonio Bay
39. Klawock Inlet
40. Twelve Mile Arm
41. Bostwick Inlet
Summary (1998-2004)
Total catch: 19 fish
Occurrence: 3 of 538 seine hauls = 0.6%
Mean fork length: not measured
Life stage: juveniles
FMP species: no
Catch
Occurrence
n = Seine hauls
Mean catch per seine haul
Occurrences by habitat type (%)
n = 3 seine hauls
n = 93
n = 143
n = 174
n = 128
BARE
KELP
EELGRASS
BEDROCK
Habitat type
Juneau
Ketchikan
Admiralty Island
Chichagof Island
Baranof Island
Prince of Wales Island
Canada
Alaska
Gulf of Alaska
N
E
S
W

DISCUSSION

Seventy-nine fish species, many of commercial importance, use shallow nearshore habitats in southeastern Alaska. Commercially important species that we captured included walleye pollock, Pacific herring, chum salmon, and pink salmon. Most of these are target species in either a groundfish or salmon FMP in Alaska (North Pacific Fishery Management Council 1998, 2002). Because we captured mostly juveniles, it appears that nearshore habitats may be particularly important nursery and rearing areas for many species. Abundant non-commercial species in nearshore habitats included Pacific sand lance and Pacific sandfish; these species are important prey for sea birds, marine mammals, and other fishes (Paul et al. 1997, Robards et al. 1999). Similar fish assemblages in the habitat types that we sampled have been observed in other areas of Alaska (Bailey et al. 1983, Orsi and Landingham 1985, Laur and Haldorson 1996, Dean et al. 2000).

For 30 of the 50 most abundant species, eelgrass was utilized more than any other habitat type based on catch. Eelgrass offers a complex three-dimensional environment that provides food and shelter for fish that is otherwise lacking on bare or sparsely covered bottoms (Heck and Orth 1980; Spalding et al. 2003). Higher abundance of fish in eelgrass than in other habitat types has been reported in many areas (Briggs and O'Connor 1971, Orth and Heck 1980, Orth et al. 1984, Lubbers et al. 1990, Sogard and Able 1991, Connolly 1994, Lazzari and Tupper 2002, Wyda et al. 2002). Some species, however, exhibited a preference for habitats other than eelgrass. For example, most flatfish were captured on bare substrates, walleye pollock in rocky areas with kelp, and Pacific sandfish near bedrock outcrops. Thus, shallow nearshore waters provide a

mosaic of habitat types, all of which are used by several species with different feeding and substrate preferences.

Differences in water temperature, salinity, proximity to spawning areas, and time of sampling likely account for some of the distribution and abundance patterns that we observed among species. Marine waters of southeastern Alaska are characterized by an inshore-offshore salinity gradient (Murphy and Orsi 1999) and a north-south temperature gradient (Quast 1968). Inside waters are more estuarine, more protected from wave action, and have more extreme seasonal temperature and salinity changes than outside waters (Csepp and Wing 1999). Thus, environmental differences likely limit the distribution of some species such as rockfish (*Sebastes* spp.) to mostly outside waters and armorhead sculpin to inside waters. Similarly, the range of blackeye goby (*Rhinogobiops nicholsii*) and kelp perch are limited to mostly outside waters of southeastern Alaska (Csepp and Wing 1999). On a smaller scale, differences in distribution and abundance of nearshore fish between inner and outer Kachemak Bay, Alaska, corresponded to differences in temperature and salinity (Abookire et al. 2000). As for time of sampling, juvenile chum and pink salmon were not captured at Neka Bay, Port Althorp, and Yakobi Island in July 1999 (Fig. 1, Table 1); chum and pink salmon fry live in the nearshore region of southeastern Alaska from about 1 April to 15 June (Orsi and Landingham 1985).

Most of the habitat types that we examined are common and are distributed throughout the rugged and complex coast of southeastern Alaska. Although eelgrass is distributed throughout southeastern Alaska, it is often absent or sparse in bays and inlets on or near the mainland. This is likely due to increased turbidity from glacial runoff from mainland rivers that inhibits eelgrass growth (McRoy 1968).

Distribution maps provided in this atlas identify fish species that may be encountered in potential shoreline development projects in southeastern Alaska. Additionally, geographic coordinates of all sampling sites identify the locations of sensitive habitat types (e.g., eelgrass meadows) that may need protection as EFH. Further studies are needed to identify the spatial coverage of eelgrass and other important habitat types in Alaska and the function of these habitats as EFH. Shallow nearshore waters support a diverse and abundant community of fishes, many of commercial importance, and should be protected from human disturbance.

ACKNOWLEDGMENTS

We thank Mike Byerly, David Csepp, Patricia Harris, and Mike Murphy for help with field work. We also thank the command and crew of the NOAA ship *John N. Cobb* for transporting scientists and gear to many of the study locations. This project was partially funded by the Essential Fish Habitat Task at the Auke Bay Laboratory.

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Table 1.--Location, habitat type, position, dates sampled, total number of beach seine hauls, and total fish catch (all species) in nearshore waters of southeastern Alaska from 1998 to 2004. A position acquired from a portable global positioning system is given for each site (habitat type) sampled at each location. For habitat types, bare = sand or gravel bottoms with no attached vegetation; kelp = rocky bottoms with mostly *Laminaria saccharina;* eelgrass = *Zostera marina*; and bedrock = steep bedrock outcrops. Location numbers are in parentheses; see Figure 1 for locations.

Location/habitat type	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
Berners Bay (1)				
bare	58.7778; 135.0078	5/01	1	192
bare	58.7864; 135.0225	5/01	1	2
bare	58.7781; 134.9881	5/01	1	46
bare	58.7786; 134.9367	5/01	1	1,098
Echo Cove (2)				
kelp	58.7057; 134.9464	6/04	1	352
kelp	58.6954; 134.9356	6/04	1	106
kelp	58.6941; 134.9342	6/04	1	36
eelgrass	58.6719; 134.9148	6/04	1	133
eelgrass	58.6693; 134.9127	6/04	1	255
eelgrass	58.6686; 134.9121	6/04	1	438

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
Bridget Cove (3)				
kelp	58.6419; 134.9581	6/04	1	987
kelp	58.6405; 134.9551	6/04	1	962
kelp	58.6386; 134.9545	6/04	1	217
eelgrass	58.6421; 134.9556	6/04	1	2,391
eelgrass	58.6348; 134.9479	6/04	1	592
eelgrass	58.6303; 134.9449	6/04	1	3,184
eelgrass	58.6252; 134.9386	6/98, 8/98, 8/99	4	5,174
eelgrass	no position	6/98, 8/98, 8/99	4	104
Benjamin Island (4)				
bare	58.5644; 134.9102	7/01, 3/02, 7/02, 3/03, 7/03, 3/04	6	4,734
bare	58.5547; 134.9061	4/01, 8/01, 3/02, 7/02, 3/03, 7/03, 3/04	7	271
bare	58.5547; 134.8983	4/01, 8/01, 3/02, 7/02, 3/03, 7/03, 3/04	7	201
bare	58.5717; 134.9242	4/01	1	83
bare	58.6013; 134.9187	4/01	1	4
bare	58.5902; 134.9045	4/02	1	5
kelp	58.5752; 134.9263	4/01, 7/01, 3/02, 7/02, 3/03, 7/03, 3/04	7	120
kelp	58.5675; 134.9150	4/01, 7/01, 3/02, 7/02, 3/03, 7/03, 3/04	7	4,707

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
kelp	58.5631; 134.9017	4/01, 7/01, 3/02, 7/02, 3/03, 7/03, 3/04	7	934
bedrock	58.5611; 134.8996	7/01, 3/02, 7/02, 3/03, 7/03/ 3/04	6	538
bedrock	58.5444; 134.9206	8/01, 3/02, 3/03, 7/03, 3/04	5	218
bedrock	58.5481; 134.9256	8/01, 3/02, 7/02, 3/03, 7/03, 3/04	6	451
St. James Bay (5)				
eelgrass	58.6100; 135.2094	7/00	1	233
eelgrass	58.5731; 135.1825	7/00	1	164
Eagle Beach (6)				
bare	58.5119; 134.8356	4/01, 8/01, 3/02, 7/02, 3/03, 6/03, 3/04	7	140
bare	58.5131; 134.8419	4/01, 8/01, 3/02, 7/02, 3/03, 6/03, 3/04	7	934
bare	58.5008; 134.7994	4/01, 8/01	2	92
bare	58.5053; 134.8106	4/01, 8/01	2	87
kelp	58.5031; 134.8669	4/01, 8/01, 3/02, 7/02, 3/03, 6/03, 3/04	7	215
kelp	58.5019; 134.8664	4/01, 8/01, 3/02, 7/02, 3/03, 6/03, 3/04	7	1,405
Auke Bay (7)				
eelgrass	58.3811; 134.6924	6/99, 7/99	2	28
Funter Bay (8)				
bare	58.2553; 134.9106	8/98	1	9

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
bare	58.2550; 134.9097	8/98	1	40
kelp	58.2503; 134.8953	8/99	1	19
kelp	58.2550; 134.8881	8/99	1	42
eelgrass	58.2483; 134.9081	8/98	1	2,088
eelgrass	58.2494; 134.9075	8/98	1	65
eelgrass	58.2533; 134.9094	8/99	1	130
eelgrass	58.2564; 134.9019	8/99	1	75
eelgrass	58.2553; 134.9097	6/01, 6/02, 2/03, 6/03	4	539
eelgrass	58.2569; 134.9003	6/01, 6/02, 2/03, 6/03	4	728
bedrock	58.2306; 134.9203	8/98	1	15
bedrock	58.2436; 134.9178	8/98	1	3
bedrock	no position	8/98	1	216
bedrock	57.5656; 135.6400	8/98	1	1
Neka Bay (9)				
kelp	58.0328; 135.6422	8/99	1	24
kelp	58.0522; 135.6458	8/99	1	40
eelgrass	58.0664; 135.6706	8/99	1	259
eelgrass	58.0500; 135.6725	8/99	1	89

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
Port Althorp (10)				
kelp	58.1553; 136.3081	8/99	1	58
kelp	58.1297; 136.3000	8/99	1	81
eelgrass	58.1111; 136.2789	8/99	1	30
eelgrass	58.1094; 136.2750	8/99	1	134
Yakobi Island (11)				
kelp	58.0742; 136.4511	8/99	1	33
kelp	58.0775; 136.4553	8/99	1	18
kelp	58.0964; 136.4947	8/99	1	11
kelp	58.0989; 136.4950	8/99	1	10,049
Tenakee Springs (12)				
bare	57.7764; 135.1817	8/98	1	44
bare	57.7758; 135.1828	8/98	1	42
eelgrass	57.7758; 135.1911	8/98	1	119
eelgrass	57.7756; 135.1914	8/98	1	81
bedrock	57.7789; 135.1319	8/98	1	1
bedrock	57.7775; 135.1272	8/98	1	2
bedrock	57.7742; 135.1981	8/98	1	0

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
bedrock	57.5108; 134.9272	8/98	1	10
Crab Bay (13)				
eelgrass	57.7364; 135.3875	6/01, 6/02, 1/03, 6/03	4	1,138
eelgrass	57.7367; 135.3836	6/01, 6/02, 1/03, 6/03	4	3,244
Hoonah Sound (14)				
eelgrass	57.7597; 135.7931	8/02	1	438
eelgrass	57.7431; 135.7931	8/02	1	562
Ushk Bay (15)				
bare	57.5617; 135.6606	8/98	1	44
bare	57.5617; 135.6617	8/98	1	33
eelgrass	57.5656; 135.6544	8/98	1	140
eelgrass	57.5628; 135.6572	8/98	1	92
eelgrass	57.5618; 135.6116	8/02, 2/03, 5/03, 8/03	4	48,520
eelgrass	57.5705; 135.6400	8/02, 2/03, 5/03, 8/03	4	5,381
bedrock	57.5675; 135.6381	8/98	1	5
bedrock	57.5647; 135.6106	8/98	1	3
bedrock	57.5667; 135.6256	8/98	1	10,124
bedrock	57.7761; 135.1539	8/98	1	124

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
Sitkoh Bay (16)				
bare	57.5264; 134.9675	8/98	1	33
bare	57.5253; 134.9669	8/98	1	1,052
eelgrass	57.5325; 134.9761	8/98	1	97
eelgrass	57.5303; 134.9767	8/98	1	742
bedrock	57.5108; 134.9272	8/98	1	137
bedrock	57.5031; 134.9111	8/98	1	18
bedrock	57.4922; 134.8919	8/98	1	5
bedrock	57.5050; 134.9269	8/98	1	656
Chaik Bay (17)				
eelgrass	57.3133; 134.4728	6/01, 6/02, 6/03	3	14,614
eelgrass	57.3142; 134.4711	6/01, 6/02, 6/03	3	26,721
Pybus Bay (18)				
kelp	57.3672; 134.1378	6/00	1	260
kelp	57.3378; 134.1222	6/00	1	68
eelgrass	57.3764; 134.1836	6/00	1	77
eelgrass	57.3872; 134.1761	6/00	1	242

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
Brothers Islands (19)				
bare	57.2958; 133.8656	7/01, 3/02, 7/02, 3/03, 7/03, 8/03, 3/04	7	1,514
bare	57.2989; 133.8233	7/01, 3/02, 7/02, 3/03, 7/03, 8/03, 3/04	7	6,989
kelp	57.3036; 133.8603	7/01, 2/02, 7/02, 3/03, 7/03, 3/04	6	13,812
kelp	57.3078; 133.8497	7/01, 2/02, 7/02, 3/03, 7/03, 3/04	6	6,486
kelp	57.3086; 133.8314	7/01, 2/02, 7/02, 3/03, 7/03, 8/03, 3/04	7	9,510
kelp	57.3092; 133.8161	7/01, 3/02, 7/02, 3/03, 7/03, 8/03, 3/04	7	34,952
kelp	57.2997; 133.8250	7/01, 3/02, 7/02, 3/03, 7/03, 3/04	6	2,366
kelp	57.2894; 133.8633	7/01, 3/02, 7/02, 3/03, 7/03, 3/04	6	25,595
eelgrass	57.2928; 133.8150	7/01, 3/02, 7/02, 3/03, 7/03, 8/03, 3/04	7	9,924
bedrock	57.3026; 133.8045	7/01, 3/02, 7/02, 7/03, 3/04	5	32,855
bedrock	57.3037; 133.8433	7/01, 7/02, 3/03, 7/03, 3/04	5	2,049
bedrock	57.2987; 133.7964	3/02, 7/02, 7/03, 8/03, 3/04	5	23,458
bedrock	57.3033; 133.8630	3/02, 7/02, 3/03, 7/03, 8/03, 3/04	6	4,408
bedrock	57.2829; 133.8417	3/02, 7/02, 3/03, 7/03, 3/04	5	6,979
bedrock	57.2910; 133.7950	3/03	1	2
Hobart Bay (20)				
kelp	57.4222; 133.4536	5/00	1	19

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
kelp	57.4233; 133.4525	5/00	1	14
Farragut Bay (21)				
kelp	57.1244; 133.2053	6/00	1	198
kelp	57.1144; 133.2050	6/00	1	58
Kelp Bay (22)				
kelp	57.2697; 134.8683	6/00	1	2,017
kelp	57.2656; 134.8858	6/00	1	433
eelgrass	57.2425; 134.8717	6/00	1	414
eelgrass	57.2428; 134.8811	6/00	1	567
St. John Baptist Bay (23)				
bare	57.2858; 135.5576	4/98, 8/98	2	52
bare	57.2847; 135.5630	8/98	1	23
eelgrass	57.2834; 135.5502	4/98, 8/98	2	170
eelgrass	57.2834; 135.5501	8/98	1	241
bedrock	57.2903; 135.5875	8/98	1	1,194
bedrock	57.3439; 135.6750	4/98	1	14
bedrock	57.3403; 135.7094	4/98	1	351
bedrock	57.3394; 135.7050	4/98	1	10

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
bedrock	57.2906; 135.5872	4/98	1	2,007
bedrock	57.2900; 135.5883	4/98, 8/98	2	30
bedrock	57.2925; 135.6050	8/98	1	510
bedrock	57.2922; 135.6044	8/98	1	41
bedrock	56.9892; 135.1508	4/98, 8/98	2	13
bedrock	57.3400; 135.7061	8/98	1	77
bedrock	57.3358; 135.7110	8/98	1	1,049
bedrock	57.3228; 135.6689	4/98, 8/98	2	17
bedrock	57.3244; 135.6689	4/98	1	16
bedrock	57.3186; 135.6719	4/98	1	43
bedrock	no position	4/98	1	11
Nakwasina Sound (24)				
bare	57.1939; 135.3878	5/98, 8/98	2	471
bare	57.1931; 135.3883	8/98	1	32
eelgrass	57.1964; 135.3847	6/01, 6/02, 1/03, 6/03	4	4,206
eelgrass	57.1975; 135.3833	6/01, 6/02, 1/03, 6/03	4	1,104
eelgrass	57.1975; 135.3842	5/98, 8/98	2	559
eelgrass	57.1964; 135.3853	8/98	1	486

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
bedrock	57.2197; 135.3556	8/98	1	36
bedrock	57.2364; 135.3550	5/98, 8/98	2	3,207
bedrock	57.2422; 135.3519	8/98	1	13
bedrock	57.2422; 135.3519	5/98, 8/98	2	59
bedrock	57.2319; 135.3708	5/98, 8/98	2	6,122
bedrock	57.2497; 135.3686	8/98	1	10
bedrock	57.2203; 135.3964	5/98	1	4,300
bedrock	57.2372; 135.3647	5/98	1	136
bedrock	57.1806; 135.3400	5/98	1	1
Katlian Bay (25)				
bare	57.1606; 135.3419	5/98, 8/98	2	1,750
bare	57.1602; 135.3423	8/98	1	473
kelp	no position	8/99	1	21
kelp	no position	8/99	1	19
eelgrass	57.1859; 135.3478	5/98, 8/98	2	1,121
eelgrass	57.1640; 135.3144	5/98, 8/98	2	1,311
eelgrass	no position	8/99	1	95
eelgrass	no position	8/99	1	129

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
bedrock	57.1564; 135.3533	5/98, 8/98	2	18
bedrock	57.1639; 135.3294	8/98	1	53
bedrock	57.1772; 135.3078	8/98	1	393
bedrock	57.1803; 135.3378	8/98	1	64
bedrock	no position	5/98	1	7
bedrock	57.1661; 135.3586	5/98, 8/98	2	2,055
bedrock	no position	5/98	1	2
bedrock	no position	5/98	1	4,000
bedrock	no position	5/98	1	0
bedrock	no position	5/98	1	1
bedrock	no position	5/98	1	128
bedrock	no position	5/98	1	3,001
bedrock	no position	5/98	1	3,000
bedrock	57.3228; 135.6689	5/98	1	196
Middle Island (26)				
kelp	57.0897; 135.4506	8/99	1	28
kelp	57.0881; 135.4508	8/99	1	45
eelgrass	57.0917; 135.4489	8/99	1	532

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
eelgrass	57.0900; 135.4489	8/99	1	163
Silver Bay (27)				
bedrock	56.9972; 135.1644	8/98	1	121
bedrock	57.0094; 135.1639	8/98	1	10
bedrock	57.0044; 135.1569	8/98	1	1
bedrock	56.9956; 135.1456	8/98	1	0
bedrock	57.3400; 135.7061	8/98	1	7
Eastern Channel (28)				
kelp	no position	8/99	1	22
kelp	56.9836; 135.3717	8/99	1	313
kelp	56.9806; 135.3111	8/99	1	409
kelp	56.9783; 135.3172	8/99	1	629
eelgrass	56.9844; 135.3717	6/01, 6/02, 5/03	3	322
eelgrass	56.9933; 135.3758	6/01, 5/03	2	493
eelgrass	56.9853; 135.3753	6/02	1	1,870
eelgrass	no position	8/99	1	168
eelgrass	56.9853; 135.3756	8/99	1	2,561
eelgrass	56.9781; 135.3119	6/01, 6/02, 1/03, 6/03	4	1,367

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
eelgrass	56.9786; 135.3108	6/01, 6/02, 1/03, 6/03	4	2,584
eelgrass	56.9782; 135.3163	6/01	1	0
eelgrass	no position	8/99	1	1,991
eelgrass	56.9792; 135.3122	8/99	1	188
Biorka Island (29)				
bedrock	56.8364; 135.4142	8/98	1	6
bedrock	56.8364; 135.4175	8/98	1	5
bedrock	56.8303; 135.4247	8/98	1	2
bedrock	56.8394; 135.4239	8/98	1	21
bedrock	56.8472; 135.4178	8/98	1	2
bedrock	56.8433; 135.3931	8/98	1	6
bedrock	56.1697; 135.4933	8/98	1	54
bedrock	56.8456; 135.4944	8/98	1	0
bedrock	56.8472; 135.5089	8/98	1	7
bedrock	56.8419; 135.5172	8/98	1	0
bedrock	56.8378; 135.5322	8/98	1	1
bedrock	56.8378; 135.5247	8/98	1	3
bedrock	56.8475; 135.4964	8/98	1	0

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
bedrock	no position	8/98	1	3
Port Camden (30)				
kelp	56.6525; 133.9569	6/00	1	5,236
kelp	56.7160; 133.9523	6/00	1	177
Kah Sheets Bay (31)				
kelp	56.5119; 133.1269	8/00	1	43
kelp	56.5153; 133.1208	8/00	1	68
eelgrass	56.5167; 133.0958	8/00	1	203
eelgrass	56.5183; 133.0969	8/00	1	157
Anita Bay (32)				
kelp	56.2269; 132.3778	8/00	1	71
kelp	56.2236; 132.3825	8/00	1	40
eelgrass	56.1886; 132.3164	8/00	1	1,010
eelgrass	56.1917; 132.3033	8/00	1	196
Steamer Bay (33)				
kelp	56.1581; 132.6967	7/00	1	51
kelp	56.1625; 132.7100	7/00	1	54
eelgrass	56.1575; 132.6978	7/00	1	96

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
eelgrass	56.1531; 132.6911	7/00	1	190
Exchange Cove (34)				
kelp	56.2400; 133.0719	7/00	1	24
kelp	56.2336; 133.0733	7/00	1	42
eelgrass	56.2111; 133.0683	7/00	1	281
eelgrass	56.2478; 133.0781	7/00	1	51
Shakan Bay (35)				
kelp	56.1453; 133.5408	7/00	1	38
kelp	56.1483; 133.5378	7/00	1	39
eelgrass	56.1936; 133.5169	7/00	1	301
eelgrass	56.1950; 133.5167	7/00	1	298
Port Conclusion (36)				
kelp	56.2536; 134.6653	7/00	1	33
kelp	56.2553; 134.6633	7/00	1	118
Warm Chuck Inlet (37)				
eelgrass	55.7708; 133.5361	7/99	1	629
eelgrass	55.7758; 133.5319	7/99	1	265
eelgrass	55.7581; 133.4708	7/99	1	370

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
eelgrass	55.7564; 133.4711	7/99	1	433
San Antonio Bay (38)				
kelp	55.3597; 133.5883	7/99	1	86
kelp	55.3597; 133.5878	7/99	1	91
eelgrass	55.3658; 133.5856	7/99	1	310
eelgrass	55.3575; 133.5869	7/99	1	105
Klawock Inlet (39)				
bare	55.5619; 133.0997	4/98, 5/98, 6/98, 9/98	4	1,502
bare	55.5622; 133.0994	4/98, 5/98, 6/98, 9/98	4	353
bare	55.5072; 133.1339	4/98, 5/98, 6/98, 9/98	4	309
bare	55.5125; 133.1297	4/98, 5/98, 6/98, 9/98	4	307
bare	55.4819; 133.1881	5/98	1	85
kelp	55.5008; 133.1672	4/98, 5/98, 6/98, 9/98, 7/99	5	470
kelp	55.5011; 133.1675	4/98, 5/98, 6/98, 9/98, 7/99	5	1,791
kelp	55.5072; 133.1006	5/98, 6/98, 9/98, 7/99	4	267
kelp	55.5125; 133.1297	5/98, 6/98, 9/98, 7/99	4	302
eelgrass	55.1697; 133.0950	4/98, 5/98, 6/98, 9/98	4	4,145
eelgrass	55.5772; 133.0944	4/98, 5/98, 6/98, 9/98	4	1,030

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
eelgrass	55.5000; 133.1644	4/98, 5/98, 6/98, 9/98, 7/99	5	3,003
eelgrass	55.5003; 133.1647	4/98, 5/98, 6/98, 9/98, 7/99	5	2,475
eelgrass	55.4872; 133.1414	4/98, 5/98, 6/98, 9/98	4	3,443
eelgrass	55.4875; 133.1414	4/98, 5/98, 6/98, 9/98	4	2,162
eelgrass	55.5361; 133.1056	4/98, 5/98, 6/98, 9/98, 7/99	5	1,856
eelgrass	55.5358; 133.1053	4/98, 5/98, 6/98, 9/98, 7/99	5	1,320
eelgrass	no position	5/98	1	21
eelgrass	55.5208; 133.1617	5/98	1	116
bedrock	55.5289; 133.1900	5/98	1	3,564
bedrock	55.5186; 133.1489	5/98	1	255
bedrock	no position	6/98	1	235
Twelve Mile Arm (40)				
kelp	55.4286; 132.6594	8/00	1	106
kelp	55.4486; 132.6539	8/00	1	72
eelgrass	55.4156; 132.6881	8/00	1	515
eelgrass	55.4283; 132.6594	8/00	1	1,517
Bostwick Inlet (41)				
kelp	55.2200; 131.7361	8/00	1	592

Table 1 -- (Cont.)

Location/habitat sites	Position (decimal degrees) N latitude; W longitude	Dates sampled	No. hauls	Catch
kelp	55.2078; 131.7278	8/00	1	107
eelgrass	55.2364; 131.7500	8/00	1	509
eelgrass	55.2342; 131.7300	8/00	1	130
Total			538	448,164

Table 2.--The 50 most abundant fish species captured in 538 beach seine hauls at 41 locations in southeastern Alaska from 1998 to 2004. Most sampling was done between June and August. Species are listed in decreasing order of abundance based on total catch. An asterisk indicates that the species is included in a fishery management plan in Alaska.

Rank	Page	Common Name	Scientific Name	Catch
1	8	Walleye pollock*	*Theragra chalcogramma*	122,792
2	9	Pacific sand lance*	*Ammodytes hexapterus*	81,667
3	10	Pacific herring	*Clupea pallasii*	67,244
4	11	Chum salmon*	*Oncorhynchus keta*	65,231
5	12	Pink salmon*	*Oncorhynchus gorbuscha*	33,461
6	13	Shiner perch	*Cymatogaster aggregata*	19,828
7	14	Pacific sandfish*	*Trichodon trichodon*	10,661
8	15	Threespine stickleback	*Gasterosteus aculeatus*	7,673
9	16	Crescent gunnel*	*Pholis laeta*	6,975
10	17	Pacific cod*	*Gadus macrocephalus*	6,101
11	18	Bay pipefish	*Syngnathus leptorhynchus*	5,282
12	19	Snake prickleback*	*Lumpenus sagitta*	2,836
13	20	Coho salmon*	*Oncorhynchus kisutch*	2,469
14	21	Tubesnout	*Aulorhynchus flavidus*	1,834
15	22	Northern sculpin	*Icelinus borealis*	1,222
16	23	Silverspotted sculpin	*Blepsias cirrhosus*	1,119
17	24	Tubenose poacher	*Pallasina barbata aix*	1,102
18	25	Pacific staghorn sculpin	*Leptocottus armatus*	846
19	26	Copper rockfish*	*Sebastes caurinus*	767
20	27	Capelin*	*Mallotus villosus*	650
21	28	Great sculpin*	*Myoxocephalus polyacanthocephalus*	618
22	29	Surf smelt*	*Hypomesus pretiosus*	522
23	30	Rock sole*	*Lepidopsetta* spp.	511
24	31	Dolly Varden	*Salvelinus malma*	364

Table 2 --(Cont.)

Rank	Page	Common Name	Scientific Name	Total
25	32	Buffalo sculpin	*Enophrys bison*	300
26	33	Armorhead sculpin	*Gymnocanthus galeatus*	200
27	34	Red Irish lord*	*Hemilepidotus hemilepidotus*	167
28	35	Black rockfish	*Sebastes melanops*	167
29	36	Kelp greenling	*Hexagrammos decagrammus*	166
30	37	Whitespotted greenling	*Hexagrammos stelleri*	166
31	38	Sturgeon poacher	*Podothecus accipenserinus*	163
32	39	Quillback rockfish*	*Sebastes maliger*	98
33	40	Blackeye goby	*Rhinogobiops nicholsii*	88
34	41	Starry flounder*	*Platichthys stellatus*	86
35	42	Pacific sanddab	*Citharichthys sordidus*	82
36	43	Lingcod	*Ophiodon elongatus*	76
37	44	Arctic shanny*	*Stichaeus punctatus*	76
38	45	Kelp perch	*Brachyistius frenatus*	69
39	46	Yellowfin sole*	*Limanda aspera*	53
40	47	Brown rockfish	*Sebastes auriculatus*	51
41	48	Masked greenling	*Hexagrammos octogrammus*	42
42	49	Painted greenling	*Oxylebius pictus*	39
43	50	Rock greenling	*Hexagrammos lagocephalus*	38
44	51	Tidepool sculpin	*Oligocottus maculosus*	35
45	52	Leister sculpin	*Enophrys lucasi*	32
46	53	Cutthroat trout	*Oncorhynchus clarkii*	27
47	54	Dusky rockfish*	*Sebastes ciliatus*	24
48	55	Crested sculpin	*Blepsias bilobus*	20
49	56	English sole*	*Parophrys vetulus*	20
50	57	Tadpole sculpin	*Psychrolutes paradoxus*	19
Total				444,079

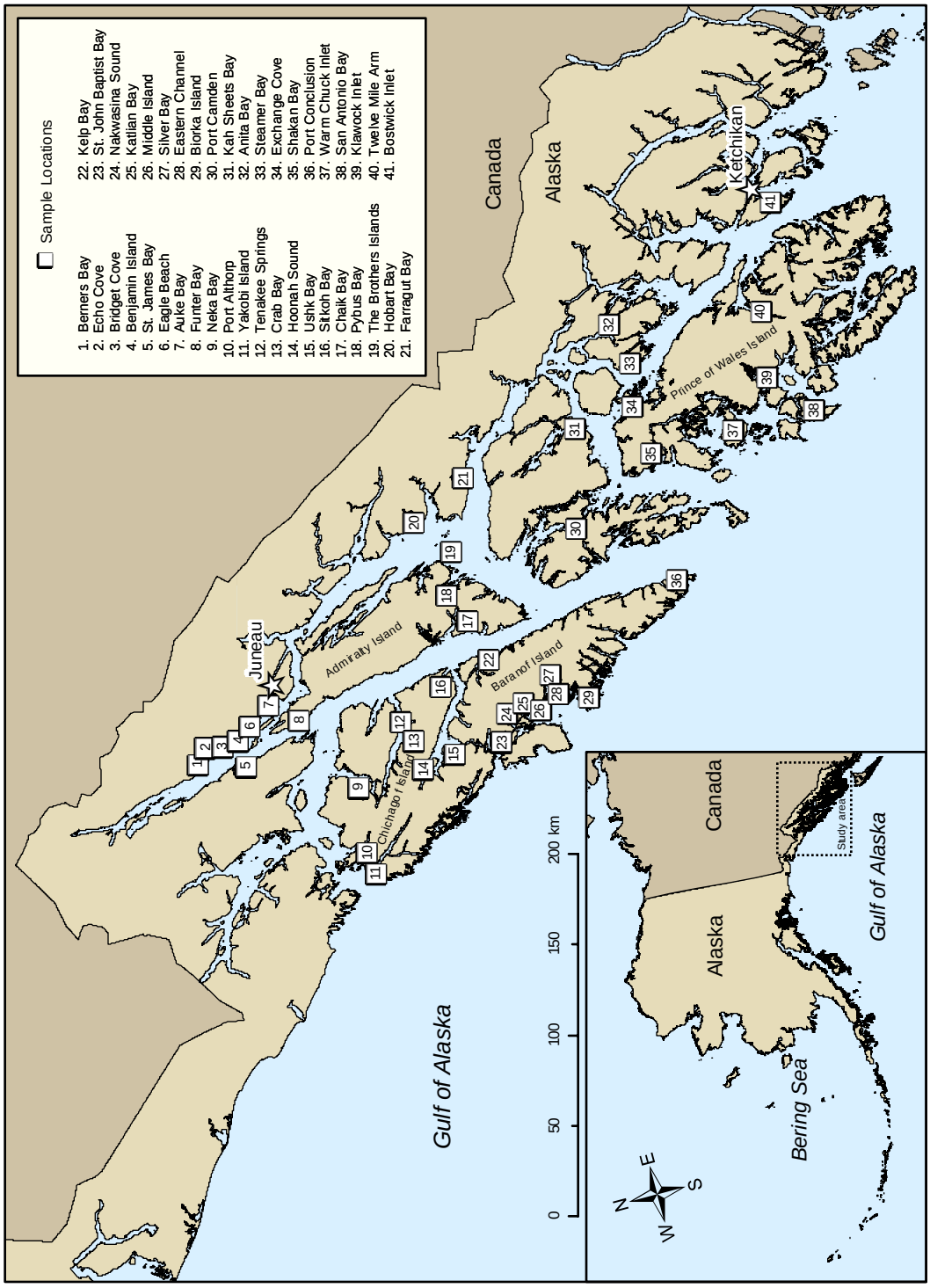

Figure 1.--Study locations sampled for fish assemblages in southeastern Alaska from 1998 to 2004. Fish were sampled with a beach seine. Most sampling was from June to August. See Table 1 for habitat types sampled at each location.

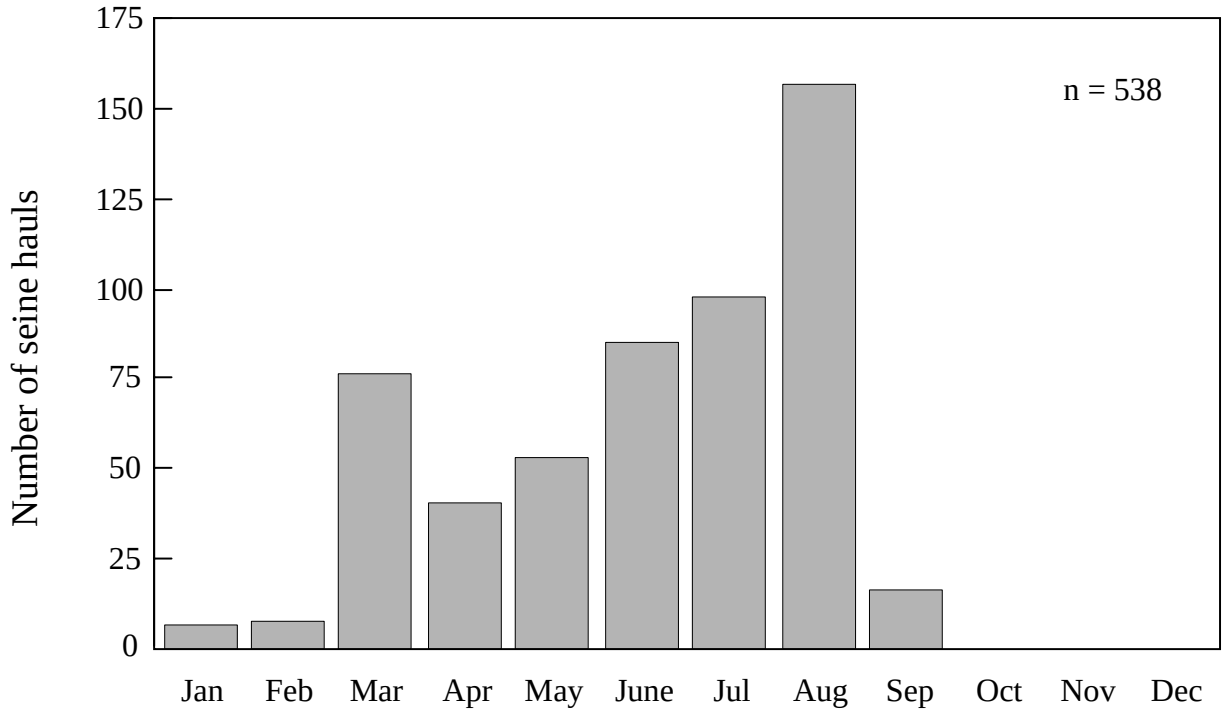

Figure 2.--Sampling effort by month for fish assemblages in southeastern Alaska from 1998 to 2004. Fish were sampled with a beach seine. See Figure 1 for all locations sampled.

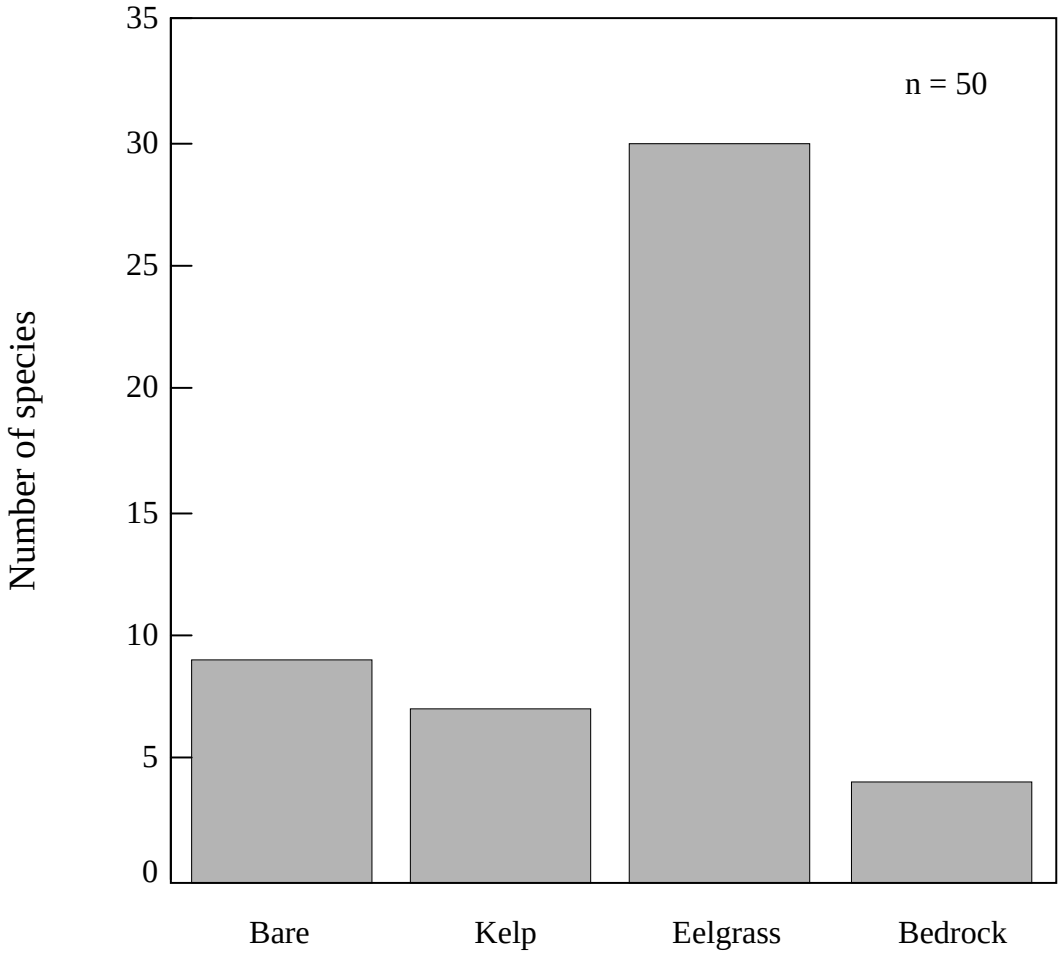

Figure 3.--Number of species by habitat type where mean catch per seine haul was greatest. Data represents the 50 most abundant species captured with a beach seine at 41 locations in southeastern Alaska from 1998 to 2004. For habitat types, bare = sand or gravel bottoms with no attached vegetation; kelp = rocky bottoms with mostly *Laminaria saccharina*; eelgrass = *Zostera marina*; and bedrock = steep bedrock outcrops.

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