

## Species monitored



## Chum Salmon

Yukon chum salmon migrate to the ocean shortly after emerging from the gravel and spend two to six years in the ocean. Two genetically distinct stocks of chum return to the Yukon River—summer and fall chum. Summer chum salmon spawn mostly in the lower 500 miles of the Yukon and weigh an average of seven pounds, whereas many fall chum migrate all the way to Canada to spawn and weigh an average of seven to eight pounds.

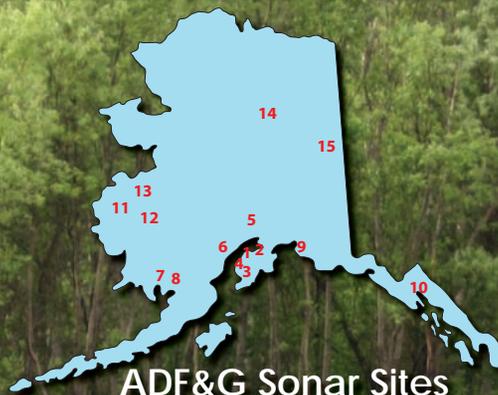


A Sheenjek fall chum salmon.

To learn more about ADF&G sonar sites visit:  
[www.AlaskaFisheriesSonar.org](http://www.AlaskaFisheriesSonar.org)

Cover photo:  
Anvik site sonar and submerged sonar transducer.

Have a question, comment or suggestion?  
Contact us by phone, e-mail or snail mail.



## ADF&G Sonar Sites

- |                   |             |                   |
|-------------------|-------------|-------------------|
| 1. Kenai (RM 8.6) | 6. Crescent | 11. Yukon (Pilot) |
| 2. Kenai (RM 19)  | 7. Nushagak | 12. Aniak         |
| 3. Anchor         | 8. Kvichak  | 13. Anvik         |
| 4. Kasilof        | 9. Copper   | 14. Sheenjek      |
| 5. Yentna         | 10. Chilkat | 15. Yukon (Eagle) |



Alaska Department of Fish and Game  
Division of Commercial Fisheries

1300 College Rd., Fairbanks, AK 99701

Regional Sonar Coordinator, Carl Pfisterer:  
(907) 459-7323 or [carl.pfisterer@alaska.gov](mailto:carl.pfisterer@alaska.gov)

Regional Sonar Biologist, Bruce McIntosh:  
(907) 459-7286 or [bruce.mcintosh@alaska.gov](mailto:bruce.mcintosh@alaska.gov)

This brochure was partially funded under award NAO8NMF4380597 from NOAA Pacific Coastal Salmon Recovery Funds administered by the Alaska Department of Fish and Game, Alaska Sustainable Salmon Fund. ADF&G administers all programs free from discrimination and in compliance with federal and state anti-discrimination laws. For the full text of this statement, or for additional formats, visit [www.state.ak.us/adfg](http://www.state.ak.us/adfg) and click on OEO statement.



## Anvik & Sheenjek River Chum Salmon Sonar Projects

How biologists use the  
Anvik and Sheenjek River  
sonar projects to generate estimates  
for summer and fall chum salmon.





The Anvik and Sheenjek Rivers are tributaries of the Yukon River and major chum spawning grounds within the Yukon drainage. The Alaska Department of Fish and Game estimates summer chum salmon at the Anvik River sonar site and fall chum salmon at the Sheenjek River sonar site.

### Where the sites are located

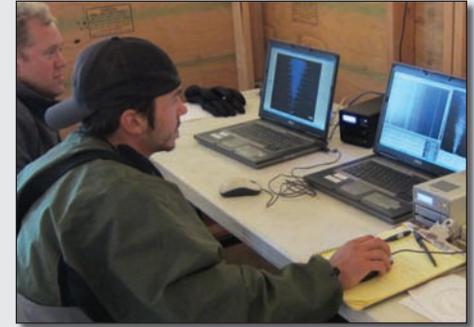
From the mouth of the Yukon River, the Anvik River sonar site is about 360 miles upstream and the Sheenjek sonar site is more than 1,000 miles upstream.

### Anvik and Sheenjek sonar operations

The Anvik and Sheenjek sonar sites use Dual frequency IDentification SONar (DIDSON). DIDSON detects fish using sound waves and produces ultrasound-like video images. ADF&G has been detecting fish using sonar since 1980 at the Anvik River site and since 1981 at the Sheenjek River site.

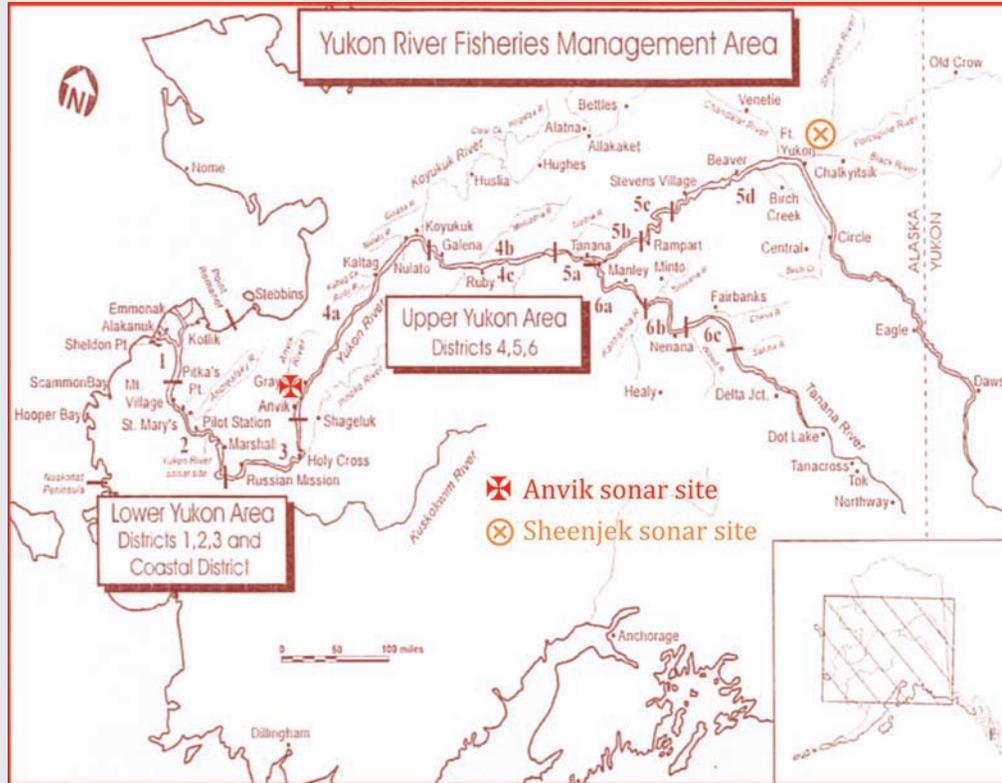


A DIDSON transducer mounted to an aluminum frame awaits deployment into the Sheenjek River.



ADF&G staff process sonar data transmitted from sonar transducers to computers in a tent at the Anvik site.

Anvik sonar site operations begin about June 16 and end July 26, and Sheenjek sonar site operations begin August 8 and end September 24.



### Sonar site beach seine net projects

At the Anvik and Sheenjek sonar sites, ADF&G also uses beach seine nets to collect length, gender and age data from a sample of the chum salmon migration. Biologists use this information to identify long-term trends in chum runs.



A technician mends a beach seine net at the Sheenjek sonar site.



Technicians sample summer chum salmon for data at the Anvik sonar site.

