

BLM Report to Eastern Interior RAC for the Fall 2024 Meeting

September 12, 2024

Fortymile Caribou Management Updates

Population Monitoring

BLM supports monitoring of Fortymile Caribou through purchase and operation of GPS radiocollars and funding of a cooperative agreement with ADFG that supports surveys and other monitoring efforts. Recent ADFG herd monitoring data indicates that the Fortymile herd continues to decline—a population model estimates roughly 32,000 animals. Results from a July 2024 photocensus may refine that estimate. Parturition rates among 3-year old females (used an index of nutritional condition) was 52%, which is the highest since 2017 and compares to 24% and 20% the last two years. Annual survival for radiocollared adult females was lower than normal.

2023_24 Fortymile Harvest Summary

Total harvest for the last year was 935 caribou (primarily bulls), including 45 taken in late winter under the State AC999 Draw Hunt. Harvest by residents of qualified rural communities is utilized to indicate subsistence harvest; it totaled 33 in the RC860 fall hunt and 21 in the RC867 winter hunt. This amounted to 6% of the total Fortymile harvest during the 2023_24 regulatory year. A large majority of the subsistence harvest occurred by Tok and Delta Junction residents. Most subsistence harvest occurred in the summer in zones 1&4 (and outside of State season dates), whereas in winter, most harvest occurred in zones 2 and 3 (and within State season dates).

2024 Fall Hunt Harvest Limits

The fall federal subsistence season dates and harvest limits were set by the Eastern Interior Field Office manager following consultation with Yukon-Charley National Preserve, Tetlin NWR manager, EIRAC chair, and ADFG Tok area biologist. The season was opened on August 1 with a harvest limit of two bulls, which was the same as the previous fall season. A two-bull harvest limit largely eliminates harvest of productive cows but provides for greater opportunity for harvest. This decision also considered the very low contribution of subsistence harvest to the overall harvest. ADFG set the State fall season to open on August 11 with a limit of one bull and announced a quota of 425 bulls for the fall hunt, a large decrease from 750 the previous year.

Fortymile Harvest Management Coalition

ADFG is planning to organize a meeting of the Fortymile Harvest Management Coalition this fall or winter. BLM is working to support ADF&G in this effort. The [Fortymile Harvest Management Plan 2019-2023](#) was “developed by the Harvest Management Coalition (HMC) to provide recommendations to the management agencies in Alaska and Yukon to 1) guide harvest management of the Fortymile Caribou Herd (FCH) in Alaska, and 2) for allocation of an annual allowable harvest between Alaska and Yukon.” During the development of that plan, Alaska members included one representative from the EIRAC and one representative of each of these ADFG Advisory Committees: Eagle, Upper Tanana (Tok), Fairbanks, Central, Anchorage, and Delta. Don Woodruff or Will Koehler served as the EIRAC representative during each of the three Coalition meetings, while the Eagle and Central AC representatives also happened to be EIRAC members. It would be advisable for the EIRAC to choose a member as their representative to this effort, and to also designate a backup. Other EIRAC members could also attend the meetings and hear the discussions.

Fortymile Hunt Enforcement Activity 2024 Fall season

BLM again applied for and received funding to support additional enforcement efforts during the Fortymile Caribou Hunt (RC860). Four officers (one BLM and three USFWS) patrolled during the first 10 days of the Youth and Federal seasons. During the early period of the State season, six officers (three BLM and three USFWS) were patrolling both the Steese and Taylor Highway areas. Periodic patrols have continued in all zones, including an airboat patrol into the remote Zone 2.

This hunt has benefited from substantial cooperation between BLM and USFWS law enforcement staffs, including contributions of equipment and resources from several Interior USFWS Refuges.

Dall sheep monitoring collaborations

The Eastern Interior Field Office has collaborated with ADFG in studying Dall sheep in the Eastern Interior since 1983, with the first telemetry study of sheep in the White Mountains and South Fork Birch Creek/West Point areas. BLM began conducting nearly annual minimum counts of White Mountains sheep in 1992 which soon became collaborative ADFG/BLM/USFWS surveys with the goal of achieving such surveys annually. These are reported periodically in ADFG Management and Harvest Reports located in their e-library (the latest published report is [here](#)). ADFG has long conducted sheep surveys in the

eastern portion of the Yukon-Tanana Uplands (including the Glacier Mountain Controlled Use Area) and BLM has provided funding for Glacier Mountain CUA surveys in recent years.

In 2004-2008, BLM, USFWS, ADFG, and NPS collaborated to conduct a GPS telemetry study of White Mountains Dall Sheep ecology, focusing on distribution, movements, survival, and health status (Bertram et al. 2020; available [here](#)).

In July and August this year, ADFG and USFWS crews completed a White Mountains Dall sheep minimum count survey. This is summarized from Jeff Well's report of survey results: A total of 167 sheep were observed. This compares to 154 observed in 2023, a low of 124 observed in 1977, a high of 717 in 1999, and a long-term average (2011-2023) of 315 sheep. Twenty-six lambs:100 ewes were observed, similar to the 2011-2023 average of 24:100. Four legal rams were observed, compared to the 2011-2023 average of 13, and the ram:ewe ratio this year was 28:100 compared to the 2011-2023 average of 41:100.

BLM will continue collaborative efforts to monitor sheep populations and look for opportunities to collaboratively conduct studies that will shed light on factors affecting Dall sheep populations.

Nome Creek Aquatic Habitat Restoration

Alaska has a rich history of gold mining spanning back to the mid 1800's. Although mining impacts on fish remain understudied here in Alaska, the quantity of quality of habitat typically desirable for fish diminish rapidly in mined streams versus non-mined streams. As such, the Bureau of Land Management (BLM) has been tasked with restoring non-functional habitats to better support aquatic resources under a multiple use mission.

Nome Creek has been exposed to placer mining operations up into the 1980's. There is a host of known fish species which commonly occur in the creek, most common are Arctic grayling and Slimy sculpin, although Round whitefish and Burbot have been observed in the area. Although, Nome Creek is not considered anadromous the creek serves as a tributary to a known anadromous stream (Beaver Creek) and continues to flow into the Yukon proper, supporting Chinook and Chum salmon runs, which have demonstrated little recruitment success over the last couple decades. Over the past few decades, Nome Creek continues to be the focus of restoration. In recent years, BLM has tested a plethora of strategies commonly used in the lower 48 to increase habitat beneficial to fish. Techniques include using Natural Channel Design and Process-Based Restoration. Here, we briefly highlight benefits gained and challenges faced incorporating these strategies.

Process-Based Restoration utilizes the river to create habitat over a long period of time, adding structure to jump start natural processes responsible for creating pool and riffle habitat (See Figures 1 & 2). Process-Based Restoration requires relatively minimal resources and provides a low-cost alternative as opposed to Natural Channel Design

which comes with a high price tag and requires a high degree of knowledge and an extensive number of resources. However, no matter the design implemented, it's important to recognize structures are susceptible to environmental uncertainties, resulting in less-than-ideal outcomes. Although, if successful, the native fauna may respond positively to the structures implemented as seen in Figure 3.



Figure 1. We experimented with post-less log structures to create step-pool features in a riffle dominated stream. These were quick and easy to create.



Figure 2. Post assisted structure simulates a fallen tree and is locked in with posts to ensure the material remains in place. This structure produces a point bar downstream and redirects flow to the opposite side, creating a more sinuous stream rather than a straight channel. Over time, the structure will assist in creating diverse pool habitat. This process can take years and the desired outcome is dependent on many environmental factors which control the rate of progress. Left: before & Right: after

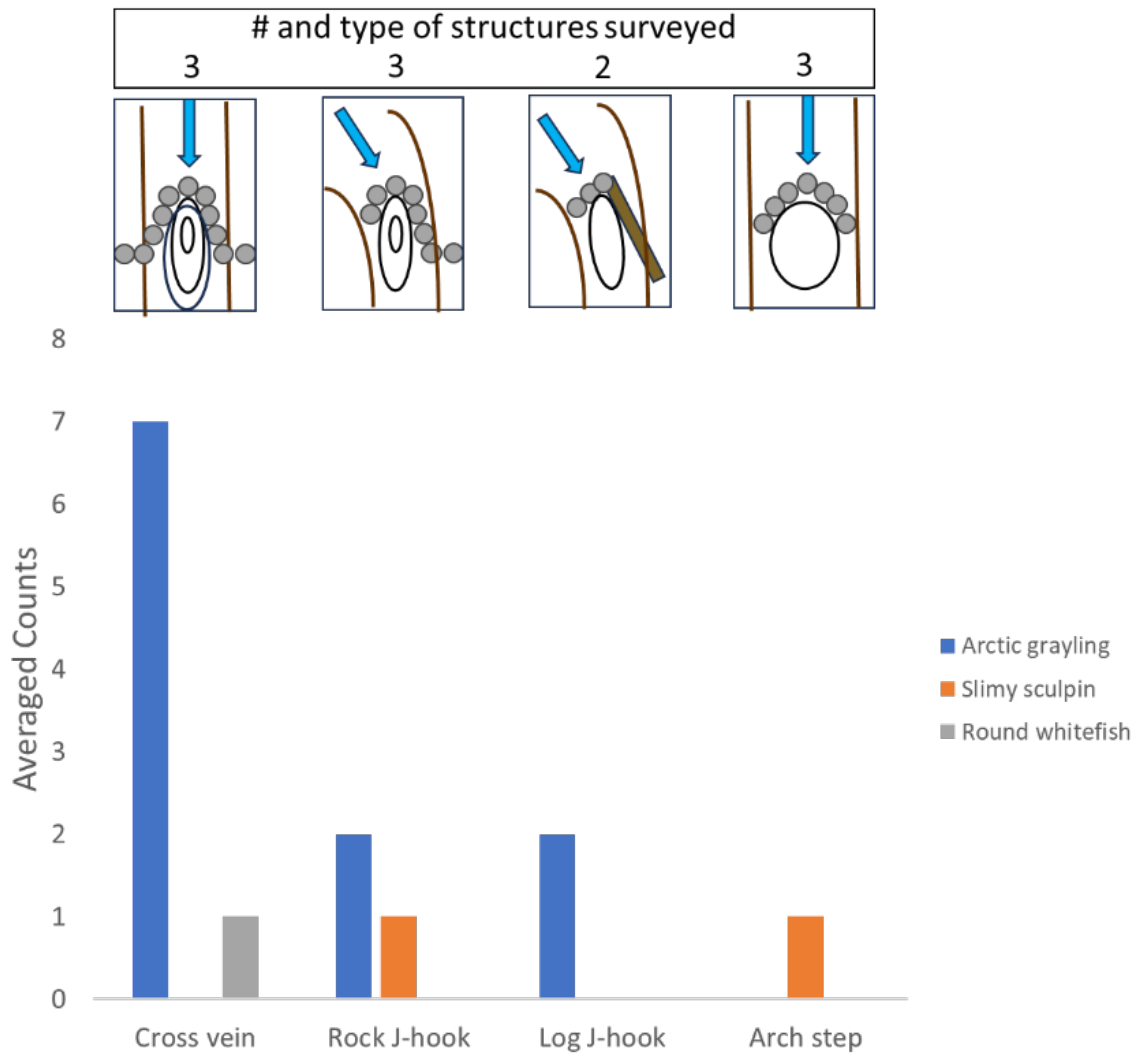


Figure 3. NCD structure types implemented and surveyed July 2024, no PBR structures were surveyed. The survey was conducted over two different sampling events in July. The light blue indicates direction of in-channel water flow and ellipses indicate location of pool habitat with respect to the structure implemented, each illustrated contour depicts increased pool depth