

Is it likely that a salmon (or grilse) that spawned in the fall of 2020 and then returned to the ocean in the spring of 2021 (as a black salmon) would return to spawn in the fall of 2021? Or would the fish wait until 2022 to return?

Some kelts do return to spawn in the year after spawning. These are typically referred to as 'consecutive year' spawners in contrast to 'alternate year' spawners which spend an extra year at sea before returning to spawn. Grilse and large salmon can show either strategy.

It is generally believed that for a kelt to be a 'consecutive year' spawner, it will not head to distant marine feeding areas (e.g., Greenland), and all its food energy will be directed to gonadal maturation. The consequence is that consecutive spawners tend to be nearly the same size (length) as when they entered the river to spawn the previous year – not surprising when you consider the short time spent at sea (3-4 months) and that time is mostly spent reconditioning, migrating, and maturing. By contrast, alternate year spawners head a long way to the best feeding areas at sea (like Greenland). This means spending more time feeding and growing. The extreme examples of this strategy are the large multi-sea-winter salmon of the Casapedia River (Gaspé) salmon that can exceed 40 pounds and may spend 3 winters at sea before returning to spawn.