

Development of Bald Eagle Etiquette for the Chehalis Flats and Harrison Mills

Prepared for the 'coalition of the concerned' – by the Chehalis Flats Bald Eagle & Salmon Preserve Committee. This document is to be constantly updated by the various, ecologically, concerned groups: Sts'ailes First Nations, Harrison Mills Regional Association, Fraser Valley Bald Eagle Festival Committee, Salmon Stronghold and the Hancock Wildlife Foundation.

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The Fraser Valley Bald Eagle Festival has promoted the presence of bald eagles in the Harrison Mills area for nearly 20 years. Most recently, David Hancock reviewed various bald eagle winter concentration areas in British Columbia and Alaska. The historic evidence clearly shows that bald eagles frequent many spawning rivers throughout the northwest, with large numbers recorded at specific sites like the Chilkat River in Alaska, the Squamish River near Brackendale BC and the Harrison River, a tributary of the lower Fraser River of British Columbia. Just upstream along the Harrison is the alluvial fan forming the Chehalis Flats where **the largest concentrations of bald eagles in the world have been recorded**. This same river flat is a designated part of the first Salmon Stronghold, to signify this is Canada's most productive river ecosystem. This area is special and deserves special attention.

The reasons for these eagle movements, and the huge gatherings of eagles on the Chehalis Flats in southern British Columbia, are two-fold: weather conditions up north and salmon availability for the eagles throughout the area. The food availability is driven by the incredible productivity of the Harrison River system salmon runs. Historically, we have seen that just having lots of spawned out carcasses does not in itself bring record numbers of eagles. Normally, the wintering eagles are dispersed all along the northwest coastal salmon rivers, feasting on the carcasses until they are eaten out or frozen under the ice. As this food source disappears under the ice or is eaten out, the eagles move south. On top of the influence of weather conditions is the actual numbers of salmon actually returning to the different rivers each season. Fewer spawned-out salmon in the northern rivers simply means, regardless of impacting weather, that less poundage of salmon are there to feed eagles – or bears, gulls, wolves etc. With fewer spawning carcasses to the north, the eagles come south to the Chehalis Flats.

The past 15 years of gradual build-up in numbers of wintering eagles in Harrison Mills seem to be related to a decline in other spawning salmon populations in northern rivers, and of course due to the increasing numbers of eagles. Then **in 2010, we had a world record for a gathering of eagles**. David Hancock counted 7,362 eagles in a 3-kilometer section of the Chehalis Flats and probably several thousand more existed in the trees, soaring and spread southward towards Harrison Bay. This is almost twice the size of any earlier recorded gathering of eagles anywhere in the world.

The importance of the fish and the Chehalis Flats alluvial fan are increasingly important to bald eagles. The flats are the southern most point of the large salmon spawning areas and do not just offer one of the last great feasting areas for the eagles before nesting but, also, an important resting and socializing place for the eagles to build up reserves for winter. As one might expect, the **Harrison Mills area also hosts the world's largest known eagle night roost--** the cirque of hills and ancient lowland forest of cedar and Douglas fir surrounding Echo Lake, one kilometer west of the Chehalis Flats. Each night and morning the eagles can be seen entering and leaving this ancient roost site. The thick forest, surrounding the Chehalis—Harrison complex, serve as day and night roosts for bald eagles in good weather.

The Chehalis Flats cut with the channels for spawning salmon, the surrounding shorelines of giant cottonwoods, the hills along both sides of the Harrison Valley from Mt. Woodside on the east to the Echo Lake cirque and night roost to the west, constitute one of the world's greatest bald eagle wintering habitats known. The **salmon flats of the Chehalis that feed these wintering eagles is a national treasure that needs protecting**.

Salmon Concerns: Undoubtedly an even bigger issue justifying the preservation of the Chehalis Flats is the welfare of the vast diversity of spawning salmon and the year-round sensitivity of spawning and rearing habitats utilized by these salmon populations. The **Harrison River** and its tributaries has recently been proclaimed Canada's most important 'salmon river' and has **been designated the first Salmon**

[Stronghold](#) in Canada whose aim is to preserve the total biological diversity that characterizes this area as one of the most productive rivers in the Pacific Northwest.

All five salmon species spawn in this ecosystem along with steelhead, rainbow and cut-throat trout as well as bull trout and a variety of other species that depend upon them for food or share their habitat. Adult salmon, their eggs and fry are present throughout the Chehalis Flats and the adjacent gravel beds every month, and then the juvenile salmon move into the tributaries, river margins and wetlands where some may reside for more than a year after that – growing and feeding other wildlife before finally swimming downstream and into the Salish Sea for the next phase of their lives.

Most importantly, some of these fish are present in the river gravels during the time when the water is low and the eagles are present on the Chehalis Flats. This is the time of spawning, digging of the redds, the hatching of the delicate yolk saced fry (alevin) which are particularly sensitive to disruption by foot traffic and shallow operating boats. Well meaning observers on foot or in a boat may inadvertently disrupt incubating fish in an effort to move closer to observe the activities of eagles, spawning salmon or waterfowl. We need to keep unnecessary disturbance to a minimum.

Unique Salmon Challenge: Salmon that spawn on the Chehalis Flats are particularly susceptible to foot and boat traffic. Spawners have keyed in on the choice gravels and wetlands, loosened and fed by Harrison Lake runoff and warm groundwater-fed aquifers that still provide flow in late winter. Many juvenile salmon fry will remain in the gravel until late March, their presence obscured by surface gravels that belies their busy life just beneath the surface while they await the spring freshet to carry them free. The goal of the Chehalis preserve is to ensure that foot and boat traffic on the soft wetland gravels is minimized after spawning.

Bald Eagle Concerns: The incredible gathering of bald eagles during each fall and winter need not just food. They need peace and quiet and rest. A bio-energetics study done 20 years ago showed that bald eagles cannot sustain their body weight, no matter how much they eat in a day, if they have to undertake wing-flapping flight for more than 28 minutes a day. They can soar almost effortlessly for many hours, in fact soar and glide for hundreds of miles a day. But the challenge for this large scavenger – predator is to eat, rest and socialize.

The purpose of [Chehalis Flats Bald Eagle & Salmon Preserve](#) is to initiate a program with the objective of reducing human disturbance to the loafing eagles out on the flats and to protect the shallow waters with eggs and fry from constantly being trodden upon by people, motors and disruptive wakes. From the eagles' and salmon's perspective, we see no problem at all with boat, kayak or fisherman traffic along the Harrison River main channel or with humans walking along the commercial developments bordering the west shoreline. These areas have large trees to let the eagles sit securely and there are no shallow gravel beds in which eggs or fish are disturbed.

Preserve Campaign: A campaign that targets the education of the outdoor sports clubs, the fishermen, hunters and camera buffs, supplemented by posters at each launch or water access site.

Sincerely,

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