**From:** Shelley Owens

**To:** [Liesl Barker](mailto:liesl.barker@gustavus-ak.gov)

**Subject:** FW: FW: TNC lands in Gustavus -- please keep and preserve

**Date:** Monday, January 8, 2024 14:13:51

**From:** Gustavus Visitors Association Gateway to Glacier Bay [<info@gustavusak.com>](mailto:info@gustavusak.com)

**Sent:** Sunday, January 7, 2024 7:35 PM

**To:** Shelley Owens [<shelley.owens@gustavus-ak.gov>](mailto:shelley.owens@gustavus-ak.gov)

**Subject:** Fwd: FW: TNC lands in Gustavus -- please keep and preserve

*Leah Okin President*

*Gustavus Visitors Association PO Box 167*

*Gustavus, AK 99826*

[www.gustavusak.com](http://www.gustavusak.com/)



---------- Forwarded message ---------

From: **David Bahr** <[david@bahrimages.com](mailto:david@bahrimages.com)> Date: Sat, Jan 6, 2024 at 9:49 AM

Subject: FW: TNC lands in Gustavus -- please keep and preserve

To: Gustavus Visitors Association Gateway to Glacier Bay <[info@gustavusak.com](mailto:info@gustavusak.com)>

Hi Leah (and others),

For your records, here’s my letter. I hope that it helps. The loss of these incredible parcels would be nothing short of tragic.

Best, David

**From:** David Bahr <[david@bahrimages.com](mailto:david@bahrimages.com)> **Sent:** Saturday, January 6, 2024 11:45 AM **To:** [alaska@tnc.org](mailto:alaska@tnc.org)

**Subject:** TNC lands in Gustavus -- please keep and preserve Dear Ms. Spohnholz,

I am writing as both a climate scientist and environmentalist to object to the potential transfer of TNC lands that surround the Gustavus community. These lands were purchased by TNC to preserve their unique and valuable habitats, ecosystems, and recreational opportunities for current and future generations. Transferring title of the lands would be a betrayal of TNC donors, local stake holders, and environmentalists who raised much of the money used in TNC’s purchase.

These beautiful lands, much enjoyed by residents and visitors alike, are a biodiverse refuge and a key part of the Glacier Bay National Park ecosystem; there is no meaningful ecological boundary between the TNC lands and the outwash plain habitat of the adjacent National Park and Dude Creek State Critical Habitat Area. As far back as the early 1930’s these TNC lands (and surrounding parcels around current-day Gustavus) were recognized by naturalist George Wright and biologist George Dixon as essential parts of the park ecosystem. For this precise reason, President Roosevelt in 1939 extended Glacier Bay National Monument to include the Gustavus forelands (along with the current TNC lands), formally recognizing their scientifically-established habitat value. These forelands remained part of the National Monument until World War II when the military unilaterally installed the Gustavus airstrip as part of its Aleutian campaign. In 1955, President Eisenhower (without scientific input) decided that the military had effectively removed the forelands from the Monument and that these lands were now of more value to private interests; the land was transferred to Gustavus homesteaders. Fortunately, subsequent Gustavus residents recognized the tremendous ecological, recreational, and scientific value of these beautiful lands and raised money for TNC to purchase and once again preserve the habitat. It would be a very sad ending to this historical and scientific context if TNC transferred these lands away from preservation and fragmented the foreland’s healthy ecosystem.

Speaking as a climate scientist, these lands are an important buffer from climate-driven coastal events, including increasingly severe storms and rising sea levels. For example, the TNC lands are pushing upwards due to “post-glacial rebound,” but our most recent scientific projections show that the flat Gustavus forelands will likely recede as sea level outpaces the rebound (see our sea level projections in Nature: <https://www.nature.com/articles/s41558-022-01441-2>). The forelands will not disappear entirely as sea level rises, but they will become an important climate buffer for the town of Gustavus as the coastline recedes. Furthermore, these lands are a critical part of Southeast Alaska’s biodiverse coast, a tremendously important and highly productive carbon sink. Removing any lands from this carbon sink will aggravate climate change. As you no doubt understand, time is of the essence for preventing the worst potential consequences of climate change, and there is no room for backstepping and eliminating carbon sinks or removing invaluable climate change buffers.

Also note that the unusually flat Gustavus forelands are a geomorphologically unusual, huge and flat, outwash plain that is very rare within Southeast Alaska. The Gustavus flatlands rank second in size only to the similarly flat Yakutat outwash plain. As such, this is a unique refuge for wildlife that prefers flatland habitat. Effectively, the TNC lands are part of an “island” of flat habitat in a sea of mountains, making the TNC and surrounding forelands a semi-insulated biogeographic system (a so- called “island biogeography”) with important implications for species diversity, abundance, and gene pools. Species richness for insulated and semi-insulated ecosystems grows as a mathematical “power law” that increases with the habitat’s size. Power law’s grow extremely fast, much like an exponential. Hence, larger insulated habitats have a dramatically higher number of species than smaller insulated habitats. As one of the largest flatland ecosystems in Southeast Alaska – surrounded and isolated by oceans and mountains – the species richness of the Gustavus TNC lands is expected to be dramatically higher than almost any other flatland ecosystem in Southeast Alaska. That is worth preserving.

Altogether, the TNC lands around Gustavus are (1) a highly unusual and very unique species-rich habitat, (2) a climate buffer, (3) a valuable carbon sink, (4) part of a huge and nearly intact habitat and ecosystem that connects with National Park and state lands (fractured only by the airport and small town of Gustavus), and (5) a highly valued recreational site for both Gustavus residents and the town’s economic engine of tourism. Transferring title of these lands would risk all these valuable attributes. Please retain title to these lands and protect them for the future.

Sincerely,

David Bahr, PhD

Glaciologist and Climate Scientist University of Colorado

303-249-7468