

# MONITORING LANDSCAPE CHANGE IN SWAN USING HISTORICAL PHOTOGRAPHY

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# Historic Photo Point Monitoring

**Park Code:** ANIA **Year of Photo:** 1922 **Date of Photo:**  **Primary Subject:** Colluvium, Landsli **Secondary Subject:** Avalanche Chute

**Photo Specification:**

**Photo File Name:** ANIA1922wrs0048 **Repeat Series:** High Potential **Subject Distance:** >100 m

**Source Media:** Digital: JPG **Source Size:** digital, 0.1-1 **Database Media:** Digital: JPG **Database Size:** digital, 0.1-1 mb

**Site Information**

**Site ID:** *Do not assign unless repeating.* **Site Name:**

**USGS Place Name:** Black Nose **Specific Geographic Locatio** from cinder ridge in Aniakchak Crater

**Est. Lat. (dd83):** 56.89691 **Est. Long. (dd83):** -158.09242 **Est. Location Accuracy:** 500 Meters

**Final Lat. (dd83):**  **Final Long. (dd83):**

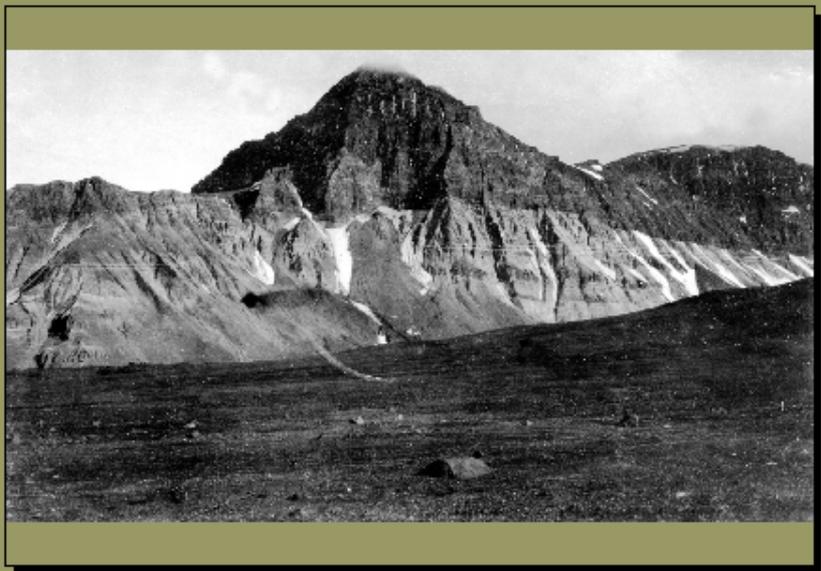
**Ownership**

**Photographer:** Smith, Walter R. **Related Project: (list in related projects table)** U.S Geological Survey field survey

**Archive Institution:** USGS Online Photographic Library **Collection Name:** unspecified **ArchiveID:** swr00048

**Distribution Restrictions:** None **Publication:** Smith 1925 **Publication Figure:** Plate 44-A

**Insert Date:** 11/1/2003 **Insert User:** GVF **Last Update Date:**  **Last Update User:**



**Picture\_Path**  
P:\2003\03-347\_NPS\_Photo-monitoring\_SWANPhoto

**Caption:**  
Black Nose, a summit in Aniakchak Crater, Lake and Peninsula County, Alaska. 1922.

**Notes**  
Plate 44-A in U.S. Geological Survey. Professional paper 132. 1925. Smith writes photo "taken from cinder ridge within the crater"; 44-A, P.P. 132, 1925

P:\2003\03-347\_NPS\_Photo-monitoring\_SWAN\Photo-Database\Photos\_LoRes\KATM1904tws0193.jpg



File 109 of 688

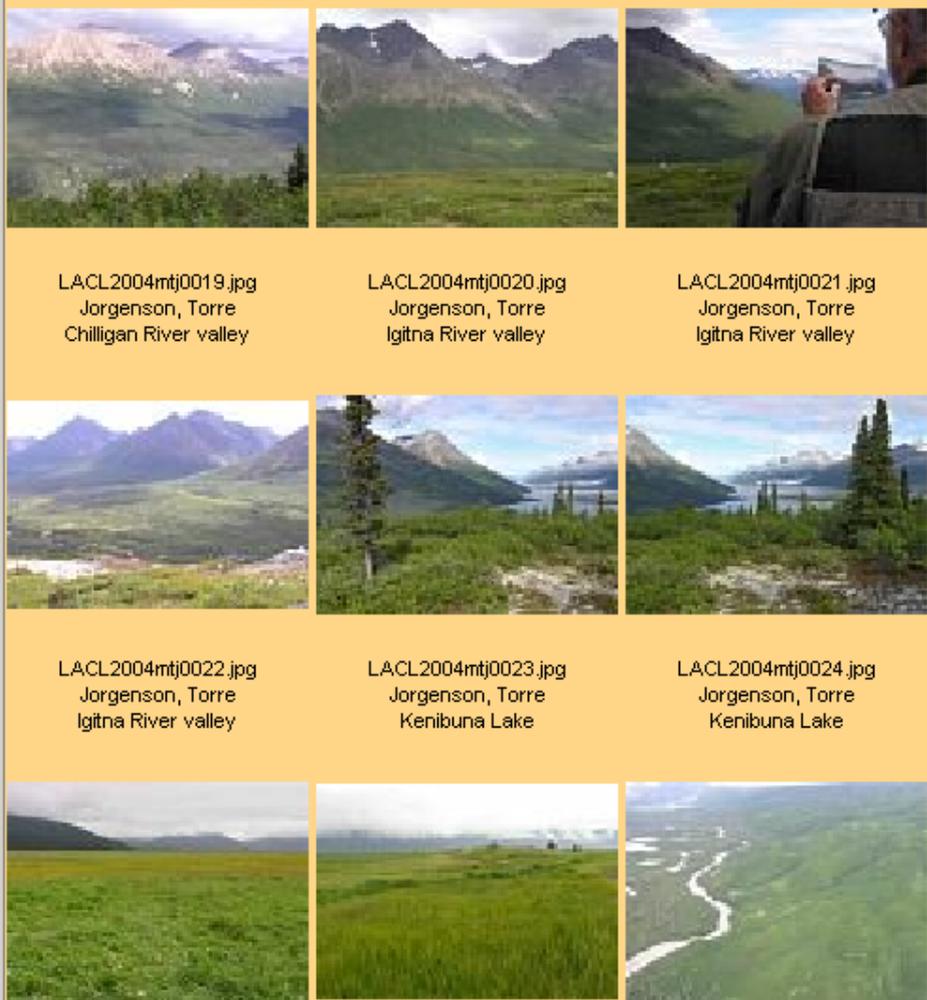
1. Physical | 2. Details | 4. Database | 5. Keywords | 6. User Fields | 7. < >

Cancel Save Revert

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<input type="checkbox"/> Photo_Year	1904
<input type="checkbox"/> Photo_Date	1904
<input type="checkbox"/> Photo_Date_Ambiguity	Known year only
<input type="checkbox"/> Photographer	Stanton, T.W.
<input type="checkbox"/> Caption	Jurassic Aucella beds below unconformity sh
<input type="checkbox"/> Photo_Notes	
<input type="checkbox"/> Geographic_Location	Kamishak Bay near mouth of Douglas River
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<input type="checkbox"/> Secondary_Subject_Type	Coastal
<input type="checkbox"/> Focal_Point_Distance	Colluvium, Landslide
<input type="checkbox"/> Repeat_Potential	Floodplain
<input type="checkbox"/> Repeat_Series	Glacier
<input type="checkbox"/> Est_Latitude_dd83	Human Disturbance
<input type="checkbox"/> Est_Longitude_dd83	Lacustrine
<input type="checkbox"/> Est_Location_Accuracy	People
<input type="checkbox"/> Final_Latitude_DD83	Plant Succession
<input type="checkbox"/> Final_Longitude_DD83	Shrub Expansion
<input type="checkbox"/> Archive_Institution	Tree Expansion
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<input type="checkbox"/> Related_Project	USGS Denver Photographic Library
<input type="checkbox"/> Publication_ID	unspecified
	USGS field survey
	Not published

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Size % 160 Font Types: (Selected)



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Jorgenson, Torre  
Chilligan River valley

LACL2004mtj0020.jpg  
Jorgenson, Torre  
Igitna River valley

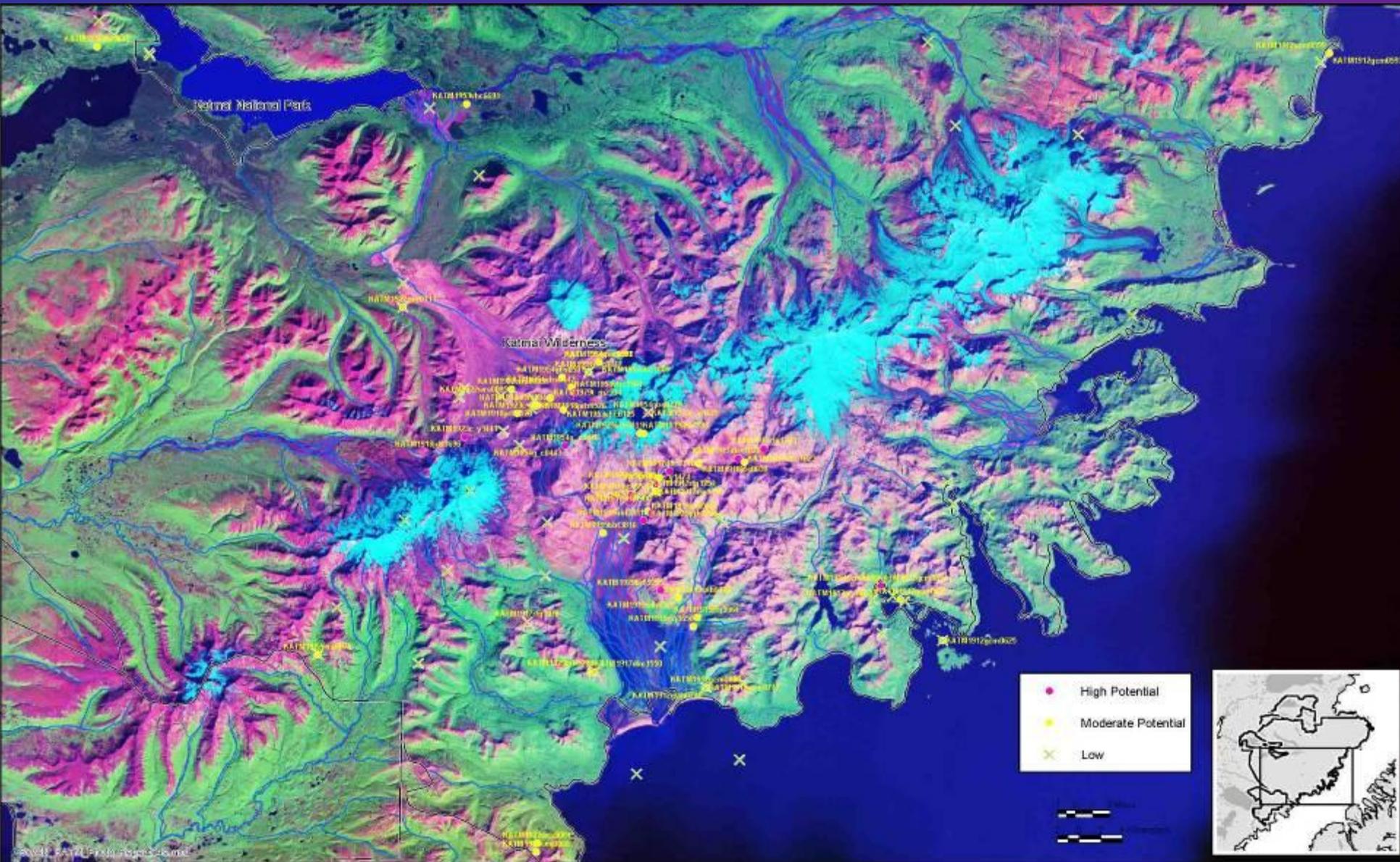
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Jorgenson, Torre  
Igitna River valley

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LACL2004mtj0023.jpg  
Jorgenson, Torre  
Kenibuna Lake

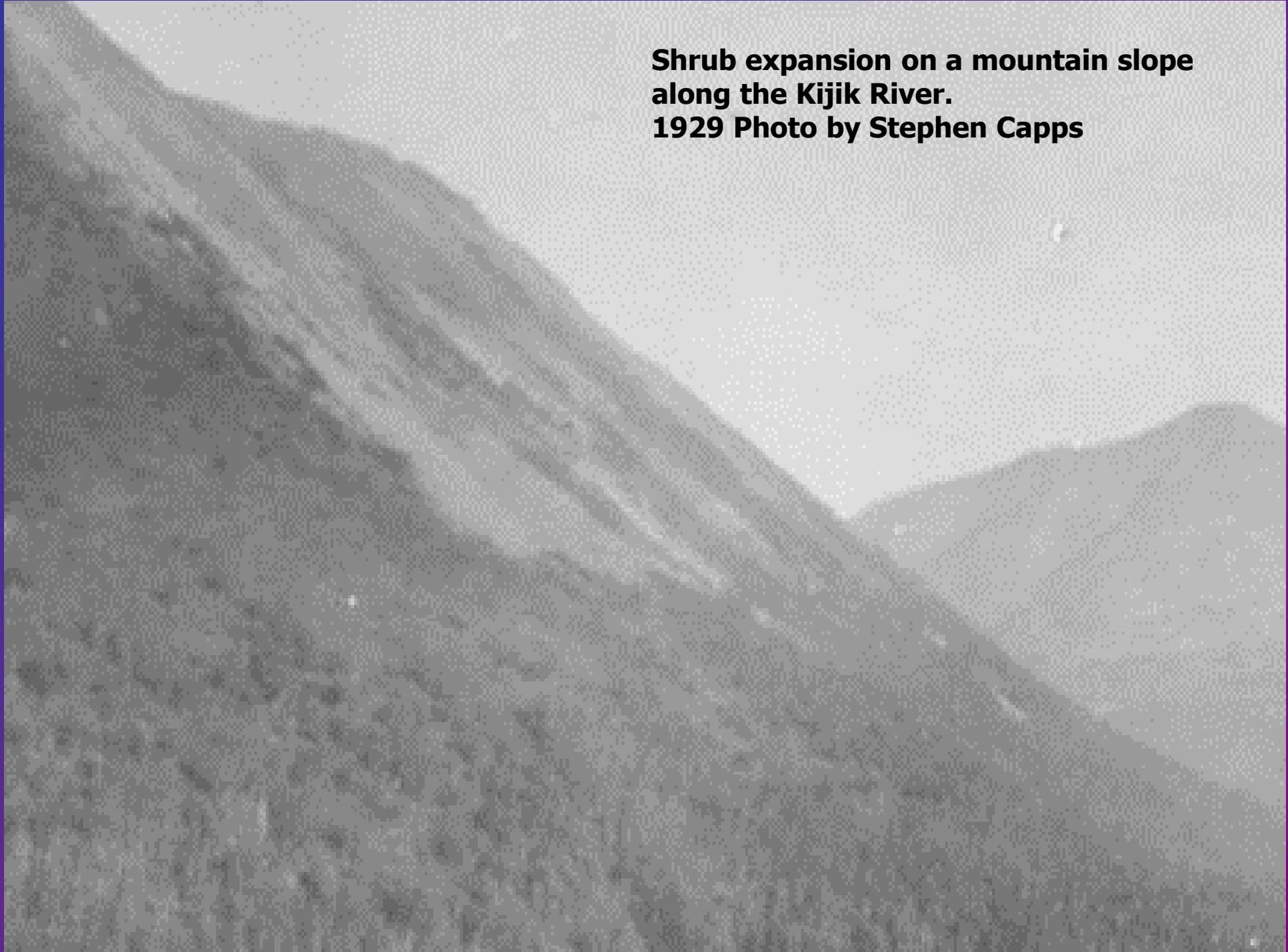
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Kenibuna Lake





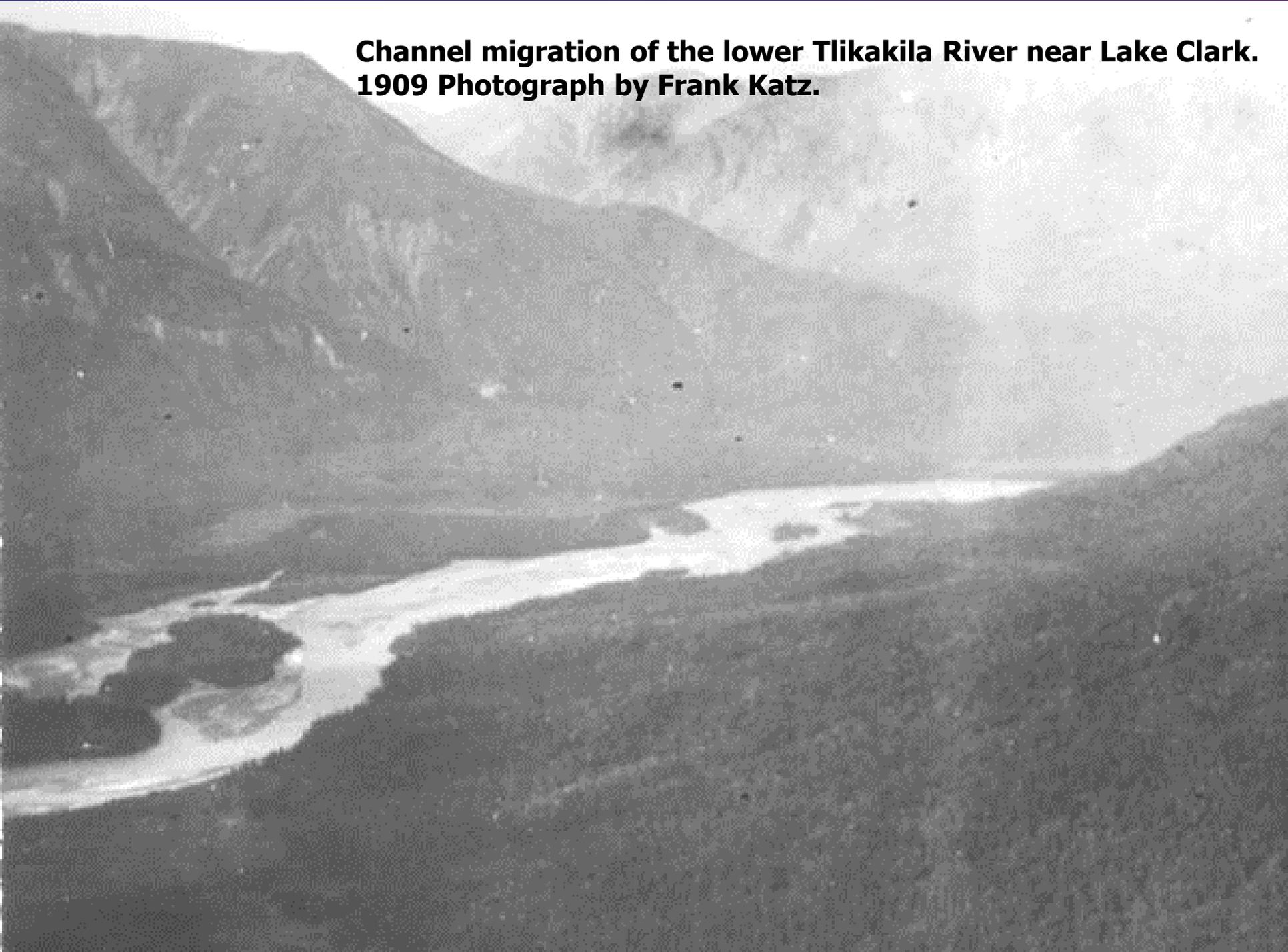
**Estimated photo point locations for historical photography acquired for southern Katmai National Park & Preserve. So far we have compiled 265 photos for KATM**

**Shrub expansion on a mountain slope  
along the Kijik River.  
1929 Photo by Stephen Capps**

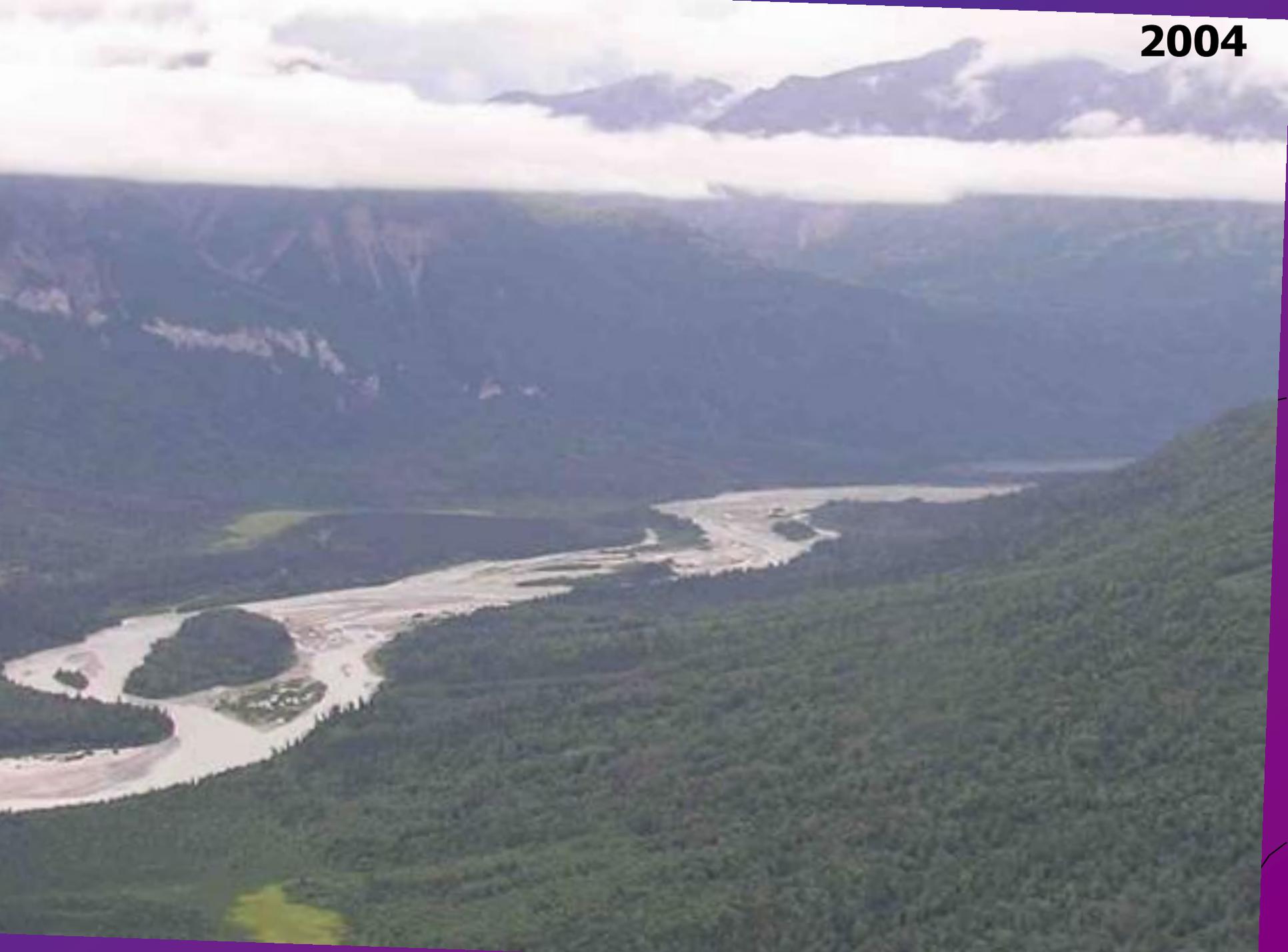




**Channel migration of the lower Tlikakila River near Lake Clark.  
1909 Photograph by Frank Katz.**



**2004**





**Photograph from 1918 by Jasper Sayre of a glacier off Mt. Mageik entering the southwest corner of the Valley of Ten Thousand Smokes.**



**2004 (Gerald Frost)**

**A 1954 aerial photo of the  
mouth of Little Glacier  
Creek entering northern  
Chinitna Bay**





**2004 Ikonos image**



**Photographs from c. 1917 by Clarence Maynard looking up the Katmai River near Katmai Canyon.**



**2004 (Gerald Frost)**

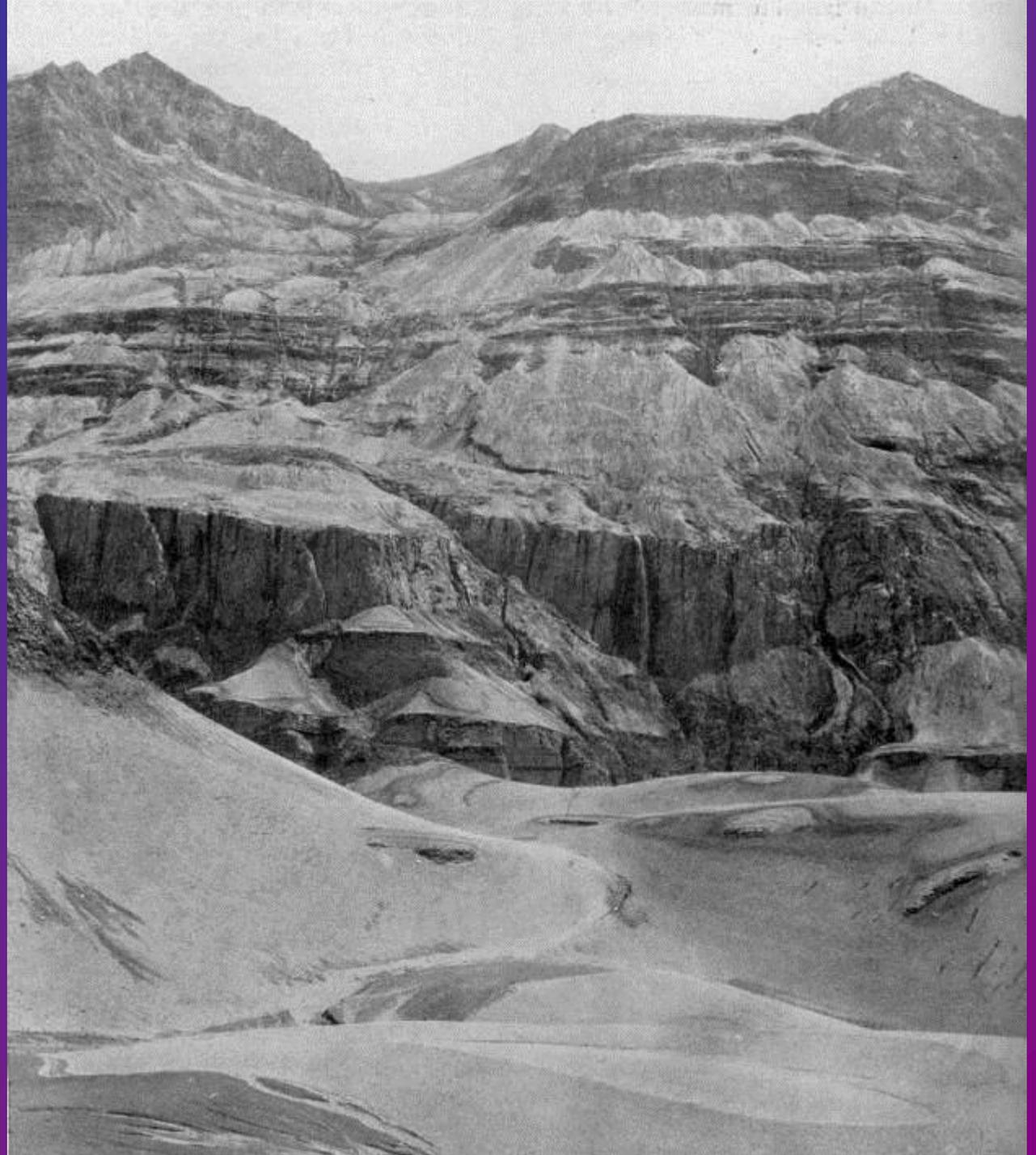


**Photographs from 1954 by Victor Cahalane near the terminus of the middle Knife Creek Glacier, Katmai National Park & Preserve.**



**2004 (Gerald Frost)**

**Photographs from  
1917 by Robert  
Griggs of the south  
wall of Katmai  
Canyon, seen from  
the southern slopes  
of Mt. Katmai.**

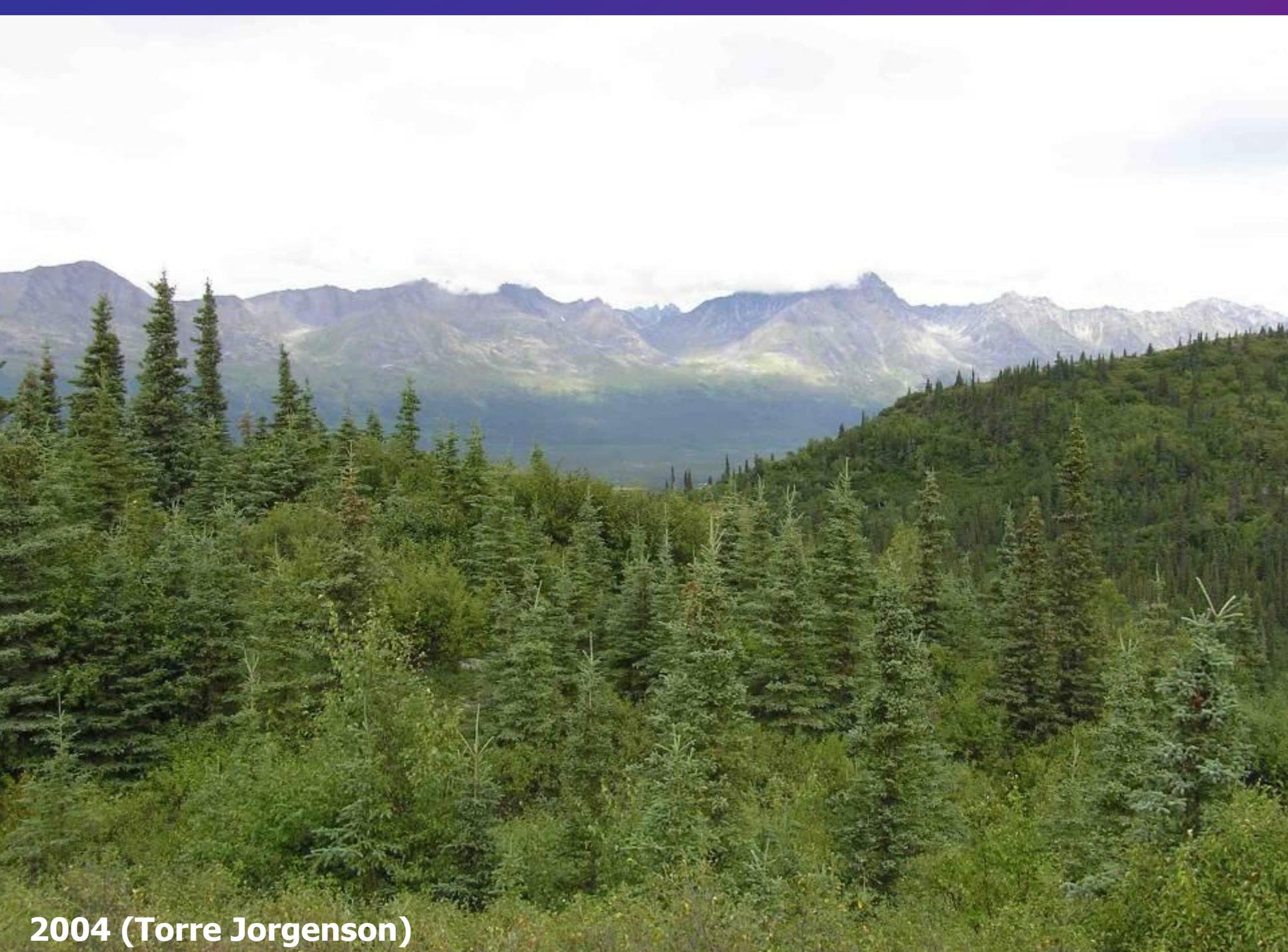




**2004 (Gerald Frost)**



**Photograph from 1928 by Stephen Capps of mountain slopes near Two Lakes and the Necons River, LACL**

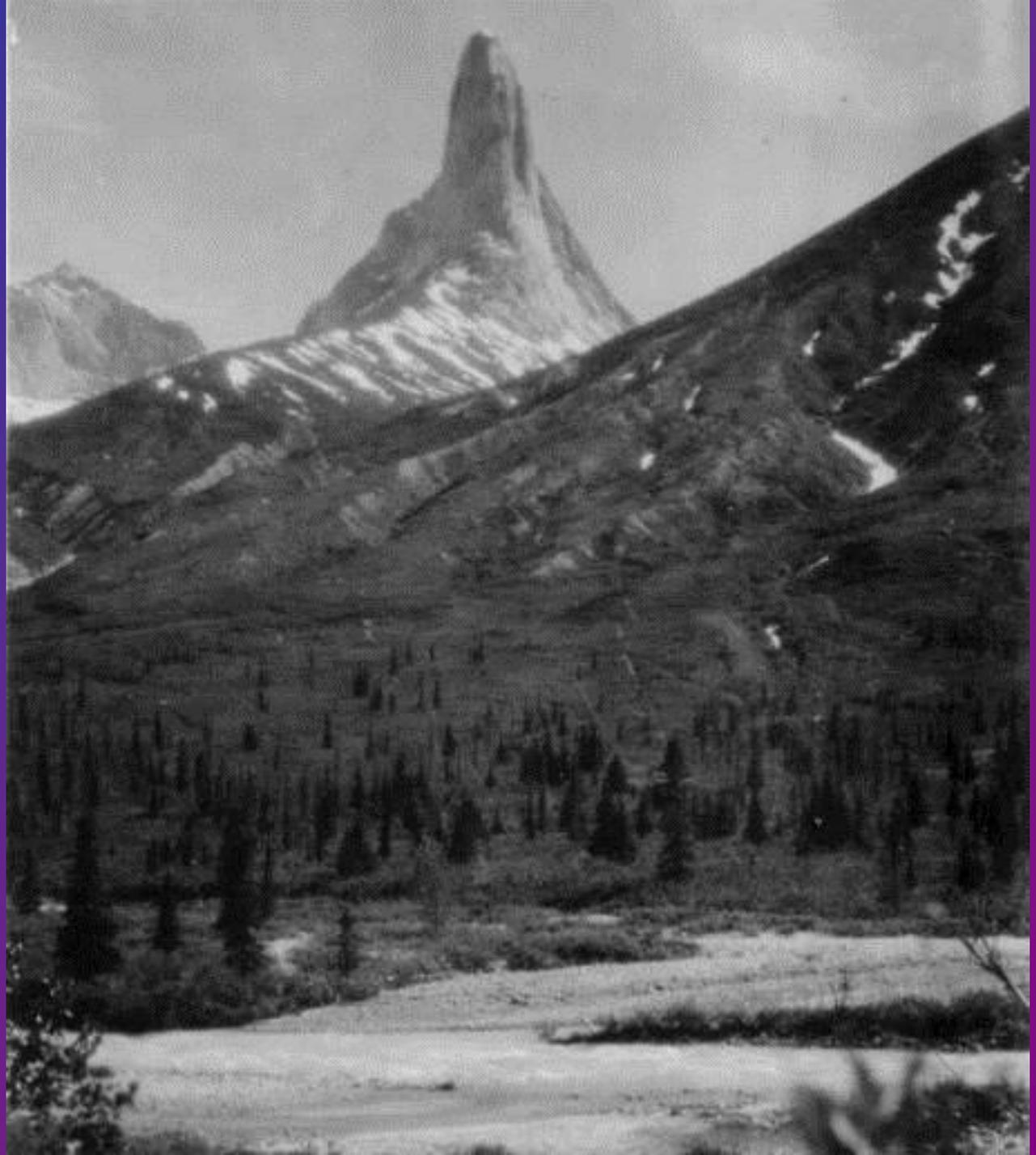


2004 (Torre Jorgenson)





**2004 (Gerald Frost)**



**1928 photograph by  
Bernard Hubbard of  
The Tusk and Another  
River, LACL.**



**2004**  
**(Torre Jorgenson)**









# CONCLUSIONS

**Photographs during the last century reveal:**

- **Glaciers have retreated rapidly, but not all.**
- **Coastline uplift has caused expansion of salt meadows**
- **Channel migration keeps braided floodplains mostly barren**
- **Alder shrub expansion and colonization rapid**
- **Treeline appears to be moving upward**
- **Alpine tundra showed little change, although dwarf birch may be more abundant.**