

Long-term monitoring of climatic and nutritional affects on tree growth in interior Alaska

J. Yarie and K. Van Cleve

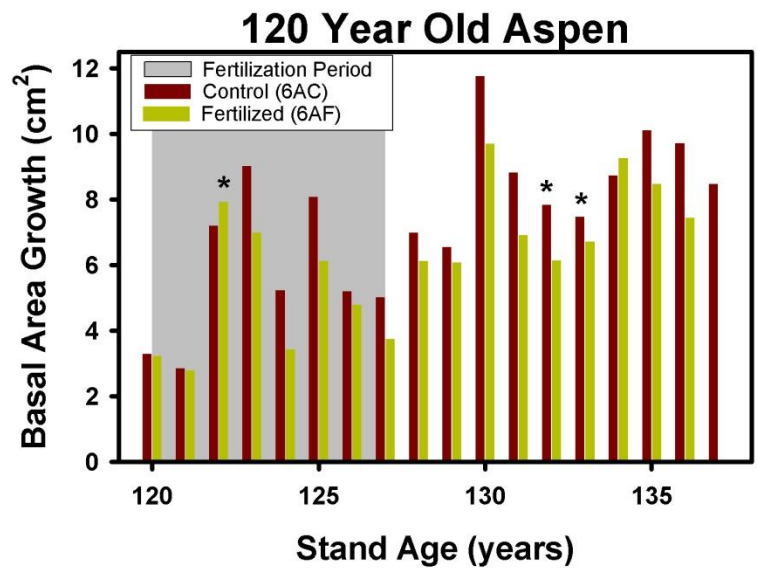
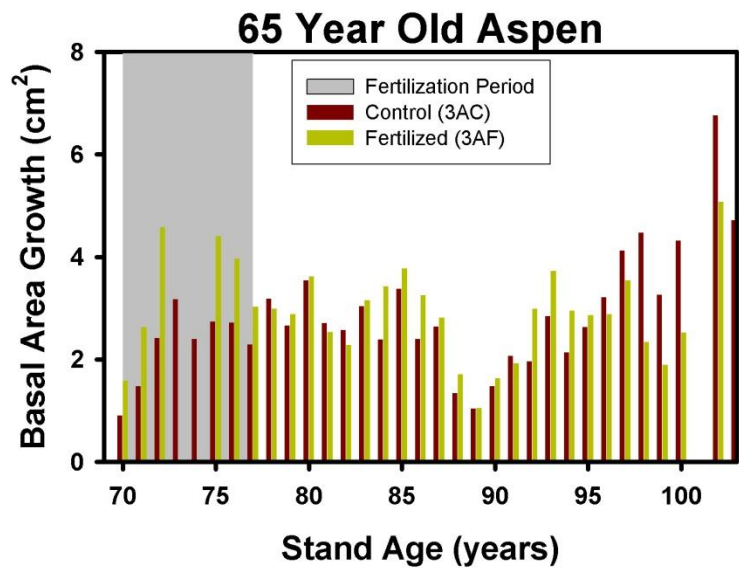
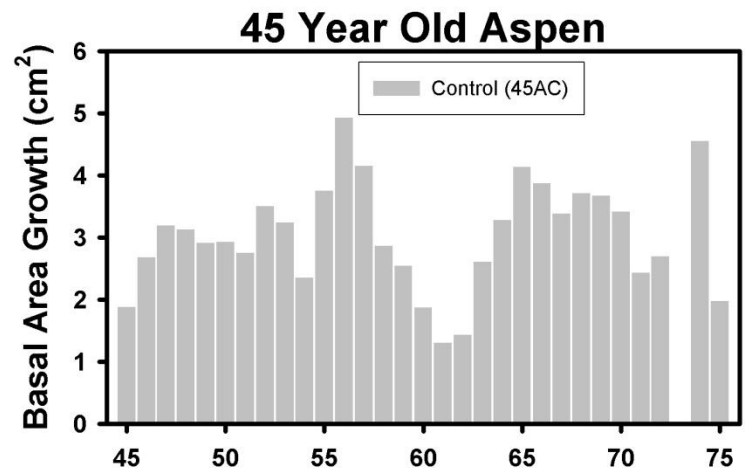
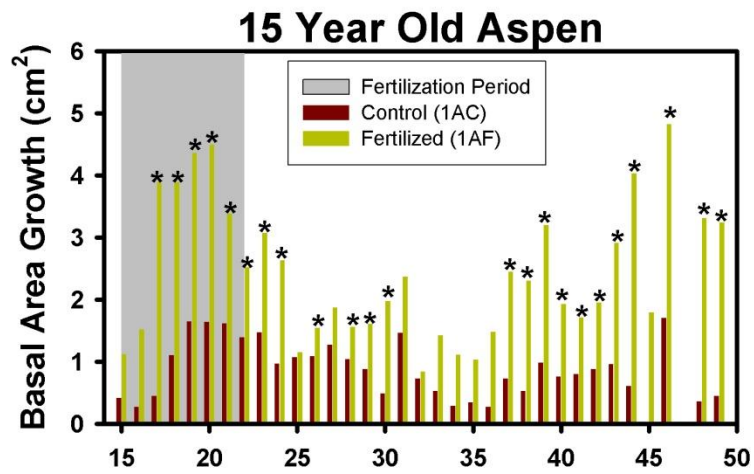
Studies used

- ❑ Three age class aspen stands
- ❑ Three age class birch stands
- ❑ One age class white spruce stand
- ❑ Two age class black spruce stands
- ❑ UP2, UP3, FP3 and FP4 LTER sites
- ❑ Monitoring on the sites reported ranged from 20 years to 35 years



Aspen Sites

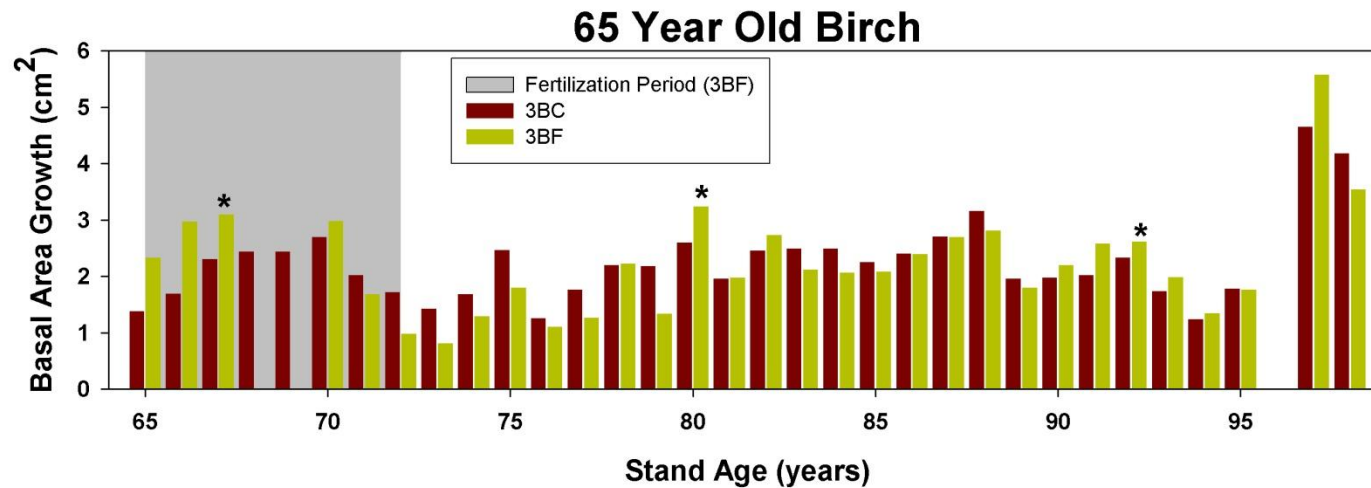
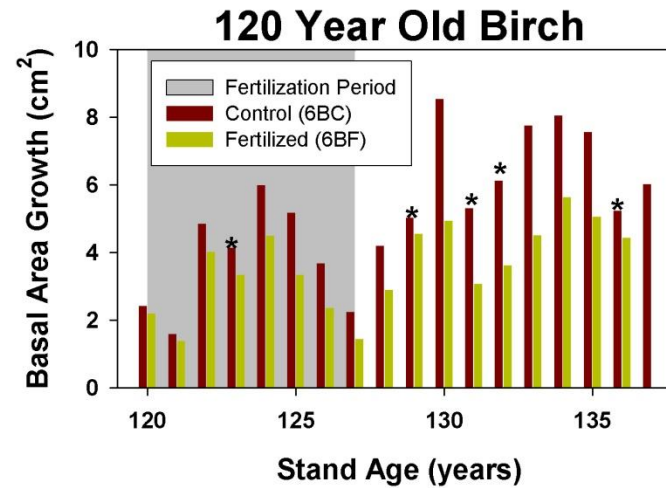
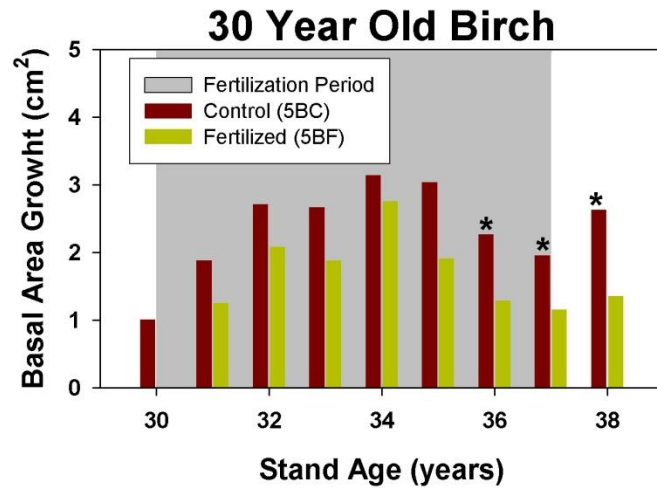
- Three age classes
- Fertilization over a five year period
- Annual monitoring of diameter growth



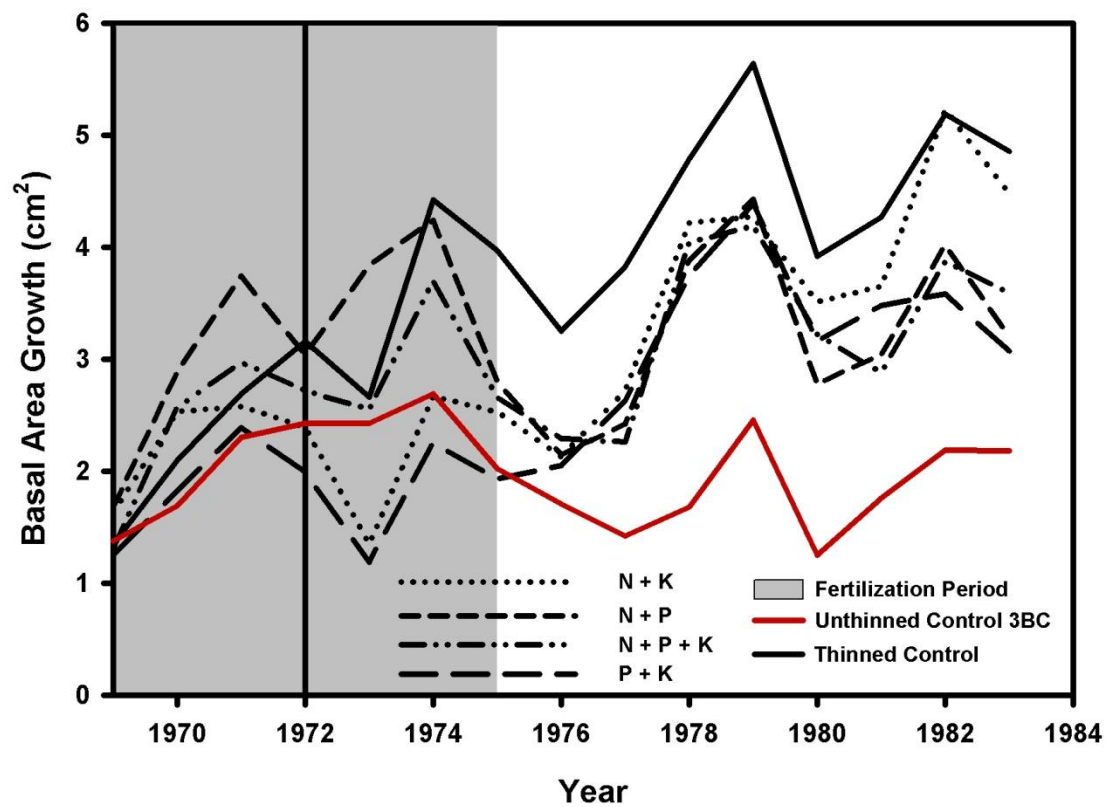


Birch Sites

- ❑ Three age classes
- ❑ Fertilization over 5 years
- ❑ Thinning study with fertilizer treatments
- ❑ Fertilizer N-levels study with 5 different amounts applied just once



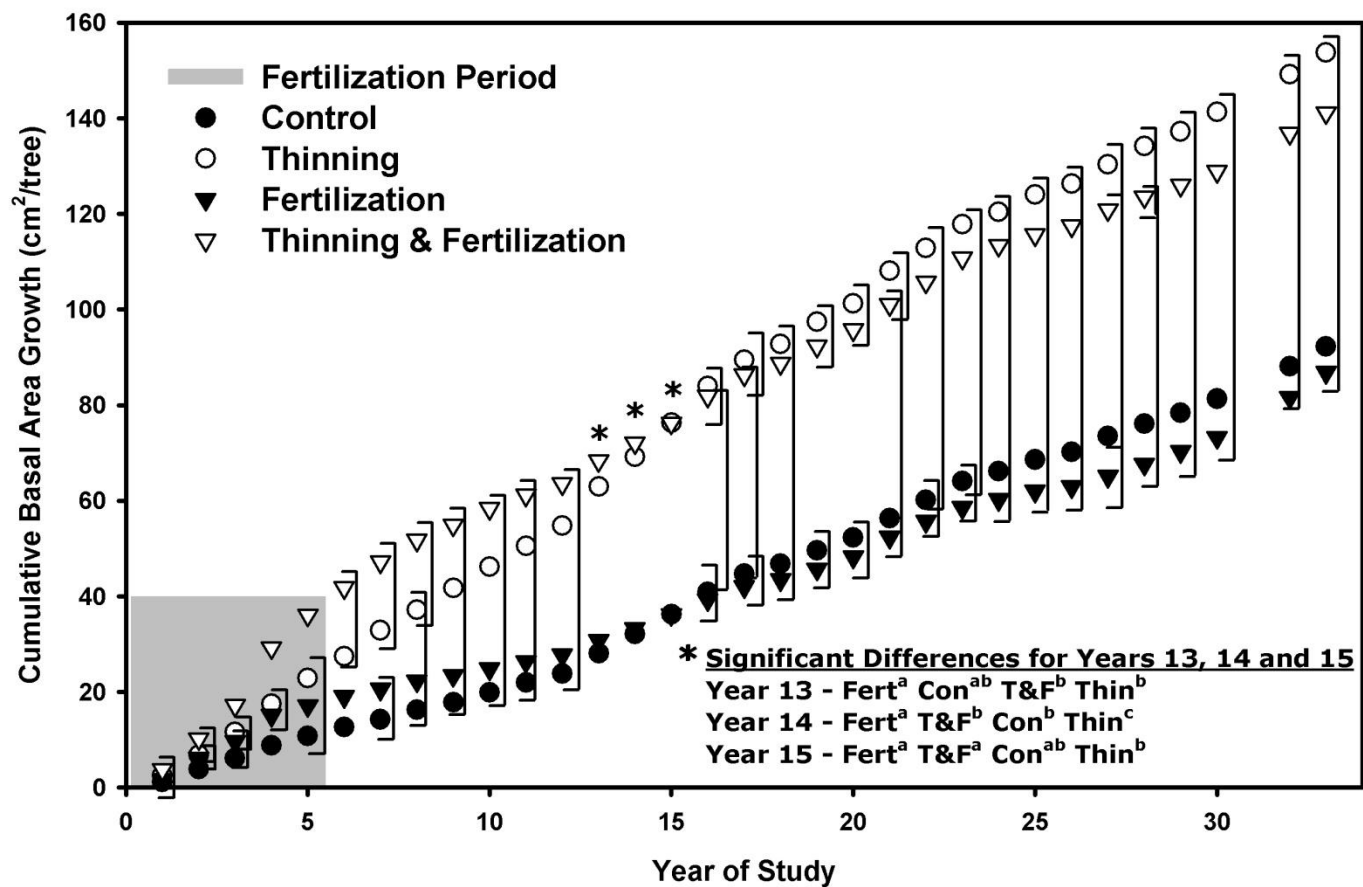
Birch Factorial Study





White Spruce

- ❑ Two studies at one site
- ❑ Simple fertilizer and thinning study
- ❑ Multiple fertilizer amounts and types plus two thinning levels





Black Spruce

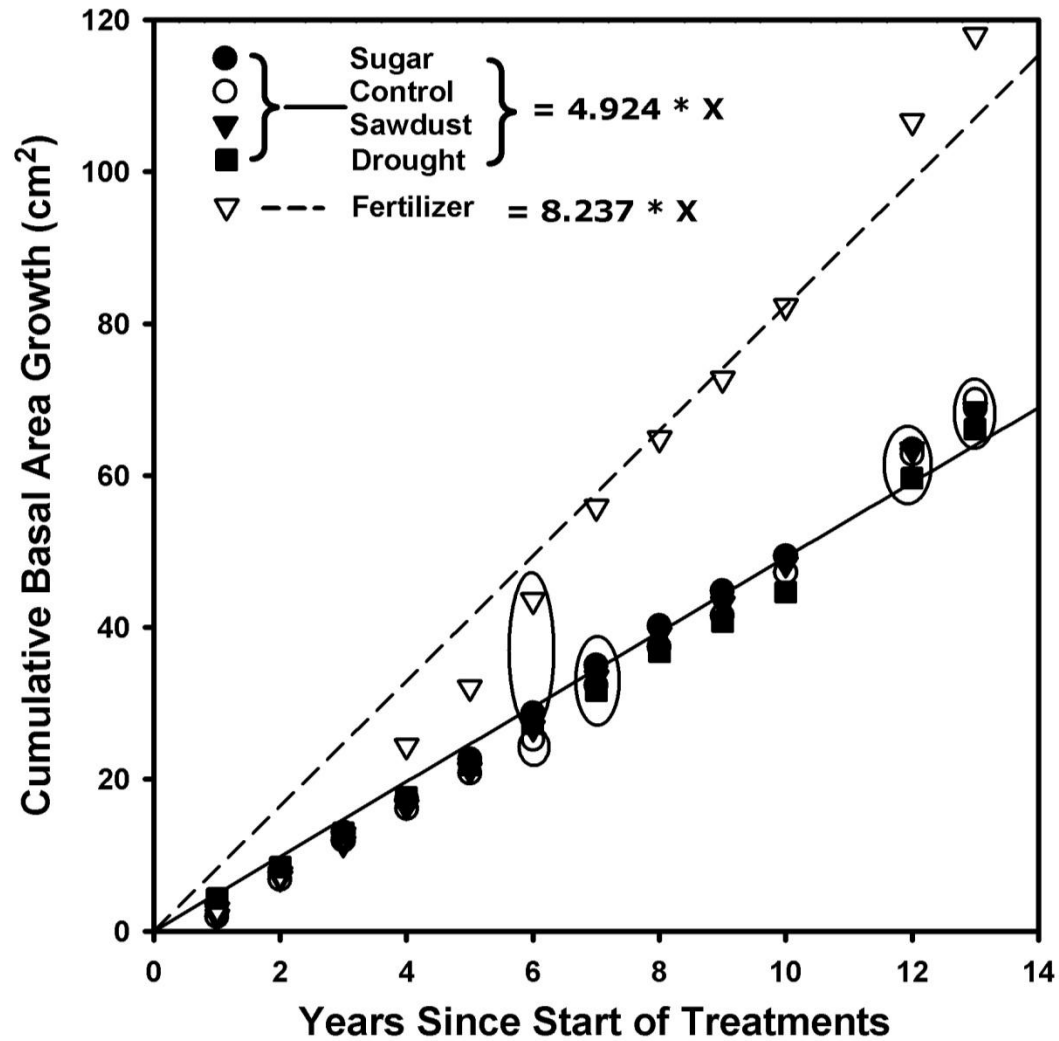
- ❑ Environmental monitoring
- ❑ No growth data
- ❑ No treatments



LTER Sites

- ❑ Low level annual fertilization
- ❑ Carbon fertilization to C/N ratio of 50 using both sawdust and sugar on separate plots
- ❑ Summer precipitation elimination on UP2 and FP3 sites

UP2 - White Spruce



FP3 - White Spruce

