Sudden aspen decline

Distribution of fundamental niche of aspen based on species distribution model.

Worrall et al., Forest Ecology and Management, 2013

Photo courtesy of W. Anderegg

Sudden aspen decline

Locations of SAD

Worrall et al., Forest Ecology and Management, 2013
Sudden aspen decline

- Stress induced by recent changes in climate

Sudden aspen decline

- Modeled stress (blue) and observed decline (red)

Sudden aspen decline

- Climate in last 100 years in Colorado
Sudden aspen decline

projections of future climate stress

Worrall et al., Forest Ecology and Management, 2013