

Sustainable Forests Education Cooperative

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2017 Workshop: Smoke Tools



At SFEC's December 2016 [Fire in Minnesota's Forests workshop](#), the issue of smoke management during prescribed burns came up. We are offering a one-day hands-on indoor workshop reviewing available online tools and techniques to predict and manage smoke on your prescribed burns or on wildfire response.

You will need to bring a laptop, power cord, and information from burns on your home unit (location, size, rough idea of fuels present, rough idea of prescription [winds, relative humidity], and location of smoke sensitive receptors) to use the online tools during the workshop. If you don't have this information, we can use sample or hypothetical numbers.

Note: Space is limited and you must register to attend. Lunch will not be provided.

Date: Wednesday March 29, 2017

Time: 8:30 a.m. until 4:00 p.m. (check-in opens at 8:15 a.m.)

Location: Minnesota Interagency Fire Center, 402 SE 11th St, Grand Rapids, MN 55744 ([map](#)). Please enter the building through the marked Training Room Entrance. Go up the blue stairs, turn right, and turn right again.

Instructor: Trent Wickman, US Forest Service, Eastern Region

Cost: This workshop is offered at no charge thanks to sponsorship from the US Forest Service, the Minnesota Interagency Fire Center, the Lake States Fire Sciences Consortium, and the University of Minnesota.

Items to bring: laptop, power cord, lunch

Continuing Education Credits: TBD

[PDF flyer](#) and [working draft agenda](#)

Links and references:

[Smoke Management resources](#) from the Lake States Fire Consortium

[Bluesky Playground](#)

[AirNow Tech](#)

[MN PCA's Current Air Quality Index](#), including links to app and email air quality alerts.

[MN DNR Prescribed Burn Handbook information and documents](#), including a link to the [2016 Minnesota Smoke Management Plan](#).

Photo: Mark Erickson / MNICS ([source](#))

Photos from the March 2017 Grand Rapids workshop:



Contact Us

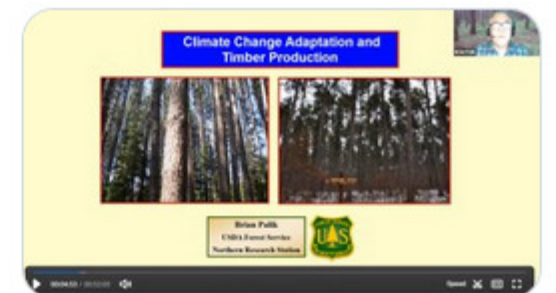
Eli Sagor, SFEC Program Manager

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Tweets from @MNForestEd Follow

 **UMN SF...** @MNFore... · Sep 21
Brian Palik gave a great talk yesterday called Adaptive Silviculture for Climate Change: Lessons for timber-oriented managers.

If you missed it, here's the recording:
sfec.cfans.umn.edu/2022-webinar-s...



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 **UMN SF...** @MNFore... · Sep 20
Starting in 15 minutes: Adaptive Silviculture for Climate Change

AGENDA

Smoke Tools

March 29, 2017, Minnesota Interagency Fire Center, Grand Rapids MN



8:15am Check-in opens

8:30am ***Welcome, introductions, and agenda review*** Eli Sagor, UMN-SFEC

8:40am ***Smoke emissions production and pollutants of concern*** Trent Wickman, USFS

Air quality regulation

Practical meteorology

Use soundings to determine mixing height, transport, and surface winds and winds above the mixing height

- Define weather pattern effects on smoke dispersion
- Make sure burning is under conditions that optimize dispersion (examples of small and large burns)

12:00pm Lunch

1:00pm ***Application of smoke impact reduction techniques***

- Lower emissions
- Better disperse your smoke

Application of smoke impact reduction techniques

- Learn and practice methods to predict smoke movement and smoke accumulations (students use tools with the example fires they brought with them)
- Tools: Smoke Screen, Vsmoke, Digital Photoseries, Bluesky Playground

Monitoring – from photos to monitors

Communications

4:00pm Adjourn



About the instructors:

Trent Wickman an Air Resource Specialist with the US Forest Service, Eastern Region. Trent grew up in northern Minnesota and the Upper Peninsula of Michigan. He attended Michigan Tech University in Houghton, MI and received a B.S. in Biology and an M.S. in Environmental Engineering. After graduation in 1996 he worked as an Air Permit Engineer for the Minnesota Pollution Control Agency for five years drafting and issuing air permits for new industrial sources. Since 2001 he has worked for the US Forest Service as an Air Resource Specialist assessing the impact of air emissions from industrial sources to forest resources and also supporting prescribed burning operations through various smoke management activities. In his spare time Trent prays for snow so he can go X-C skiing, is a boy/cub scout leader, fishes and chases his two boys around. Trent is based in Duluth. twickman@fs.fed.us, (218) 626-4372.

Eli Sagor manages the University of Minnesota's Sustainable Forests Education Co-operative. He has been with the University of Minnesota since 2000. esagor@umn.edu, (218) 409-6115, <http://sfec.cfans.umn.edu>