

Rainmaking With Trees — as created / discovered by Chris Searles

Claims

It's a good time for a paradigm shift. "Rainmaking with Trees" is a direct and simple way to enrich our environment and enhance life by helping trees do what they do so well: make rain. It's not a gadget, it's just taking a bit of time and paying attention, rehydrating large trees in strategic locations. Forests "make rain" and keep making it as long as they are healthy. "Rainmaking with Trees" is literally just strategic forest rehydration, which when executed according to the steps below can reliably, with small amounts of water applied in droughted forests:

- 1) **Eliminate Fire Risk** over contiguous forest landscapes and neighboring landscapes as they share and cycle moisture across vast distances downwind, according to the scale and condition of the forest itself. "Rainmaking with Trees" depends primarily on transpiration to achieve substantial local to regional effects over landscapes.
- 2) **Attract and/or Generate Rainfall** perfectly suited to a forests' extant needs, and typically, subsequent rainfall events (see next item). "Rainmaking" rains typically arrive outside of all seven-day forecasts (each project is planned one to two weeks in advance of the target rainfall day) and are 100% successful when piggybacked onto cloudy-day forecasts or some percentage of rainfall chance.¹ (I always aim for cloudy in the ten day forecast, three days consecutively, after watching local patterns in my site area closely for several days or weeks.)
- 3) **Restore a trustworthy and mind-bogglingly water-efficient, bio-beneficial, biophysical, climate-soothing landscape-moistening process** provided by plants, at grand scale, it appears. After more than 100 experiments the landscape / atmosphere / forest / moisture systems appear to consistently aim for *rebalancing* overall hydration — according to the benefit of the life in the forest, in the ways they share moisture after they have the water resource delivered via the steps below. Furthermore, after "a rainmaker rain" has initiated rainfall, receiving forest systems often continue cycling unforecast precipitation as rain, fog and drippy fog for three or more days — outside of the forecasts. These effects appear to be somewhat leverable.
- 4) **Improve global security and quality of life**, eliminate forest fire forever (moist forests don't burn), increase food production reliability, reduce global warming and extreme weather, reduce or reverse wildlife losses, reduce and reverse pollinator losses, and perhaps stop the climate crisis' most immediately deleterious effects: fires, stagnant hot air (bleaching and drought), erosion and violent storms, as well as grow new economic priorities, by implementing these techniques during dry seasons.

How To

We can teach anyone how to do this and in so doing: update global human understanding on the value and identity of trees and forests, deploy strategic forest "rehydrators" cost-effectively in any part of the world there are trees, inspire new economic valuations on landscape life's care and regrowth, and steer current environmental solutions-culture, investments, and efforts to *biospherically-regenerative actions* which are both meaningful to carry out and which increase the capacity of *other life* to thrive.

Here are the simple steps and criteria for carrying out this process:

1. **Locate strategically.** Locate your watering site and sites upwind-, or in the middle-of, as large a forest as possible.² Your site cannot be in "Exceptional" drought, it must be in lesser stage, "Moderate" to "Severe" drought work best. (Drought levels: <https://droughtmonitor.unl.edu/CurrentMap.aspx>)

¹ Note: whenever I say "I've got +100 rains" I'm referring to projects where there was anywhere from a 0% to 35% chance of rainfall on the site the day I began watering — and I believe *never yet* rain in the forecast seven to 10 days in advance of my target day. My target days have all been correct, so far, except Uvalde 1 (2023), the rains came an afternoon/day earlier than expected.

² Ellison, 2017. Makareiva since 2007. Keys; etc.

2. **Water a lot of trunks.** You are looking for 250 to 300 inches of tree trunk at the base, with large canopies to match. Ten to twelve old-growth trees spread out in two groves is an ideal scenario. If that's not possible find the equivalent amount of trunk diameter and matching canopy distributed over whatever tree inventory is present. These parameters and ratios appear to be scalable in multiple forest types and climate regions. Water Conifers year-round. Water Deciduous trees only in warm months (when leafy).³
 - Water pressure directions: coming next week
 - No water pressure directions: ""
3. **Water each tree until "lush."** Water-in slowly and attentively until the tree has been restored to a lush state. Buckets work best, perhaps, because measuring water use and directing the flow is simple. Total water delivered to catalyze forest rehydration will range from 500 to 5,000 gallons depending on the state of the forest system. Roughly speaking:
 - Trunks 12 to 20 inches in diameter at base should get at least 100 gallons of bucket-trickled water at the trunk, if the tree is large and in a state of drought. Total water balance per trunk, if you're doing 100 gallons at the trunk plus 5 to 10 gallons of spritzing, plus 7.5 to 30 gallons of slow trunk washing depending on type, condition and size of bark. Stop watering when the tree is cool and moist to the touch. Your goal is to get your grove(s) to a lush, self-cooling state.⁴
4. **Done.** Let the biosphere / atmosphere take it from here. Throughout this process, as each tree comes online and begins exchanging moisture, beneficial changes will take place. Once two groves in right locations have been "watered-in" all of the claims above should substantiate.

Our Challenge

Let's work together to immediately test these techniques, especially where forest fire is most present or threatening today. Based on my experiences, there is much more to this science than has currently been measured — a whole field of opportunity for understanding atmospheric moisture flows in new and more globally-beneficial ways. Obviously, Science, Conservation, Technology, Indigenous Peoples' empowerments, and Citizen Science all have a place here, in addition to Fire Prevention, landscape securitization (for Agriculture, Timber, Fossil, etc.), and global quality of life improvement.

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³ Jaschenko, 2012. Fu, [2017](#); etc.

⁴ Inferred from all of the research above (footnotes 1&2 can have dozens of citations if need be), and learned by experience: slow to lush works best, individually and systemically.