

## CONTROLLED BURNS AND FOREST HUSBANDRY IN ROMAN ITALY

### 1. Lucretius, *De Rerum Natura* 1.897-906

“At saepe in magnis fit montibus,” inquis, “ut altis  
arboribus vicina cacumina summa terantur  
inter se, validis facere id cogentibus austris,  
donec flammai fulserunt flore coorto.”  
scilicet, et non est lignis tamen insitus ignis,  
verum semina sunt ardoris multa, terendo  
quae cum confluxere, creant incendia silvis.  
quod si facta foret silvis abscondita flamma,  
non possent ullum tempus celarier ignes,  
conficerent volgo silvas, arbusta cremarent.

“But,” you say, “often on great mountains it happens that the topmost branches of tall trees being close together are rubbed one against another when the strong south winds compel them so to do, until the flower of flame breaks out and they blaze.” Assuredly, and yet fire is not implanted in the wood, but there are many seeds of heat which stream together by rubbing and make a conflagration among the forests; whereas if the flame were hidden in the forests ready made, the fires could not be concealed for a moment, they would consume the forests everywhere, burn up the trees.

### 2. Vergil, *Georgics* 2.303-311

nam saepe incautis pastoribus excidit ignis,  
qui furtim pingui primum sub cortice tectus  
robora comprehendit, frondes que elapsus in altas  
ingentem caelo sonitum dedit; inde secutus  
per ramos victor per que alta cacumina regnat,  
et totum involvit flammis nemus et ruit atram  
ad caelum picea crassus caligine nubem,  
praesertim si tempestas a vertice silvis  
incubuit glomerat que ferens incendia ventus.

For oft from thoughtless shepherds falls a spark, which, lurking at first unseen under the rich bark, fastens on the trunk, and, gliding to the leaves aloft, sends to heaven a mighty roar; then, running on, reigns supreme among all the boughs and high treetops, wrapping all the grove in fire, and belching skyward black clouds of thick pitchy darkness; most of all, if a tempest from above has swooped down upon the woods, and a favouring wind masses the flames.

### 3. Vergil *Aeneid* 10.405-411

ac velut optato ventis aestate coortis  
dispersa immittit silvis incendia pastor  
(correptis subito mediis extenditur una  
horrida per latos acies Volcania campos;  
ille sedens victor Flammas despectat ovariantis):

non aliter socium virtus coit omnis in unum  
te que iuvat, Palla.

And as in summer, when the winds he longed for have risen, some shepherd kindles fires here and there among the woods; suddenly the spaces between catch fire, and Vulcan's bristling battleline spreads unbroken over the broad fields; he, from his seat, gazes down victorious on the revelling flames: just so all your comrades' chivalry rallies to one point in aid of you, Pallas!

**4. Florus, *Epitoma de Tito Livio* 1.18.2**

Igitur victor Italiae populus R. cum ad fretum usque venisset, more ignis, qui obvias populatus incendio silvas interveniente flumine abruptitur, paulisper substitit.

The Romans, then, victorious over Italy, having now extended their bounds to the Straits, halted for a space, like a fire, which, having laid waste the woods that lie in its course, is held up by an intervening river.

**5. Vergil, *Georgics* 1.84-93**

saepe etiam steriles incendere profuit agros  
atque levem stipulam crepitantibus urere flammis;  
sive inde occultas vires et pabula terrae  
pinguia concipiunt, sive illis omne per ignem  
excoquitur vitium atque exsudat inutilis umor,  
seu pluris calor ille vias et caeca relaxat  
spiramenta, novas veniat qua sucus in herbas,  
seu durat magis et venas adstringit hiantis,  
ne tenues pluviae rapidive potentia solis  
acrior aut Boreae penetrabile frigus adurat.

Often, too, it has been useful to fire barren fields, and burn the light stubble in crackling flames; whether it be that the earth derives thence hidden strength and rich nutriment, or that in the flame every taint is baked out and the useless moisture sweats from it, or that that heat opens fresh paths and loosens hidden pores, by which the sap may reach the tender blades, or that it rather hardens the soil and narrows the gaping veins, that so the searching showers may not harm, or the blazing sun's fierce tyranny wither it, or the North Wind's piercing cold.

*All translations taken from the relevant Loeb Classical Library editions.*

**SELECT BIBLIOGRAPHY**

- Hin, S. 2013. *The Demography of Roman Italy*. Cambridge UP.
- Hughes, J.D., and J.V. Thurgood. 1982. "Deforestation, erosion, and forest management in ancient Greece and Rome." *Journal of Forest History* 26.2: 60-75.
- Hughes, J.D. 2001. "Ancient deforestation revisited." *Journal of the History of Biology* 44.1: 43-57.
- Iles, L. 2016. "The role of metallurgy in transforming global forests." *Journal of Archaeological Method and Theory* 23: 1219-1241.
- Lelle, M.A., and M.A. Gold. 1994. "Agroforestry systems for temperate climates: lessons from Roman Italy." *Forest & Conservation History* 38.3: 118-126.
- Meiggs, R. 1984. *Trees and Timber in the Ancient Mediterranean World*. Oxford UP.
- Morley, N. 2001. "The transformation of Roman Italy." *JRS* 91: 50-62.
- Ulrich, R.B. 2007. *Roman Woodworking*. Yale UP.
- Yeo, C. 1948. "The overgrazing of ranch-lands in ancient Italy." *TAPA* 79: 275-307.