


Description of best practice

Best practice	
Title	Single tree silviculture (STS)
Picture	
Domain	Silviculture Sustainable management and planning
Source of wood	Stemwood;
Location	CREA – Foresta e Legno https://goo.gl/maps/AcrfvEFGDbbMSTzi9
Implementers	Unione dei Comuni Valdarno e Val di Sieve (Fi) 43°35'18.85"N 11°28'50.37"E Città metropolitana di Firenze (Fi e Po) 43°52'11.06"N 11°36'05.35"E Unione dei Comuni Amiata Val d'Orcia (Si) 42°51'29.92"N 11°40'28.31"E Unione dei Comuni della val di Merse (Si) 43°10'12.08"N 10°11'57.94"E Unione dei Comuni del Pratomagno (Ar) 43°37'54.95"N 11°37'36.77"E Unione dei Comuni Amiata Grossetana (Gr) 42°53'53.47"N 11°37'14.96"E Unione dei Comuni Colline Metallifere (Gr) 43°06'30.54"N 10°58'30.31"E Unione dei Comuni Appennino Pistoiese (Pt) 44°07'26.12"N 10°42'08.66"E
Actual status	Running
Approach	Silvicultural approach that early selects a limited

	<p>number of target trees to which ensure a free and harmonious development of crown and trunk. The thinnings are selective or from above and they are oriented to remove the direct competitors of the target trees, preserving the remaining stand. The target trees are chosen as a function of vigor, stability, tree morphology, spatial distribution. The number of released target trees (from 50 to 120 per hectare) depends on the site characteristics, the species, the biotic and abiotic risks, the type of owner, the silvicultural goal.</p>
<p>Main results</p>	<p>From an economic and productive point of view:</p> <ul style="list-style-type: none"> • decreasing the management costs • reduction of rotation time • increasing of quantity and quality of assortments • production of high-quality timber relatively quickly • enhancement of phenotypes and / or species potentially able to produce quality timber <p>From an ecological and environmental point of view:</p> <ul style="list-style-type: none"> • increase of individual and stand stability • increase of biodiversity • increase of structural complexity • maintenance of an irregular canopy cover • protection of sporadic species <p>From a social point of view:</p> <ul style="list-style-type: none"> • integration with the traditional forestry • increase of non-wood products • increase of landscape value
<p>Lessons learned</p>	<p>This approach can be applied in high forests and in coppices, in conifers (as <i>Pinus nigra</i> and <i>Pseudotsuga Douglasii</i>) and broad-leaved species, to social (<i>Fagus sylvatica</i> and <i>Quercus sp.</i>) and valuable (<i>Castanea sativa</i>) or sporadic tree (<i>Prunus avium</i>, <i>Sorbus sp.</i>, <i>Fraxinus sp.</i>, ...) species, in public or private property. To apply this method is necessary:</p> <ul style="list-style-type: none"> • Specific training and care of technicians and workers from tree marker to logging • Specific training of people involved in the control of the forest utilization.
<p>Contact information</p>	<p>CREA – FL -- +39 0575 353021 Francesco Pelleri francesco.pelleri@crea.gov.it</p>

Link to website	http://www.selvicoltura.eu/
Code	BP_IT_07

Best practice assessment

Region	Tuscany
Time scale	2010 - 2019
Mobilization Potential	Similar to traditional silviculture but with a higher amount of big and more valuable assortments
Kind of wood concerned	Stemwood
Sustainability Potential	Very positive
Impact on environment & biodiversity	Positive effects
Ease of implementation	Medium implementation due to the great attention during the cutting and logging phases
Economic impact	Enhancement of valuable assortments; decrease of management cost but increase of expertise of forest companies
Job effect	Connection to other wood and no-wood chain
Income effect	Possibility to obtain income more frequent during the rotation period
Specific knowledge needed	Forest training
Costs of implementation	6.000-7.000 euros per hectare
Technical readiness level	2 applicable
Key information for adoption	Awareness of all stakeholders in the supply chain