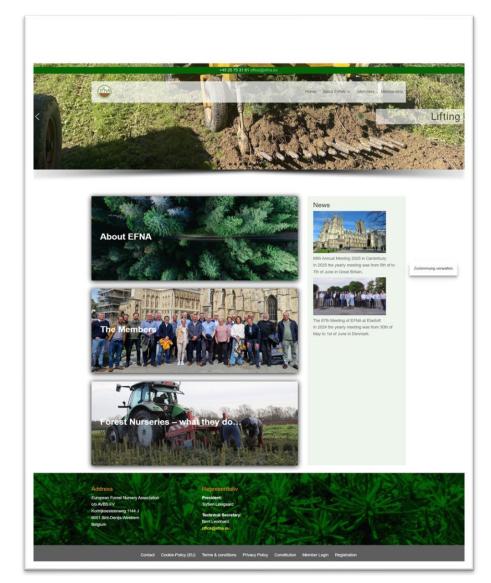
# The perspective of European nurseries

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- Technical Secretary of EFNA
- European Forest Nursery Association



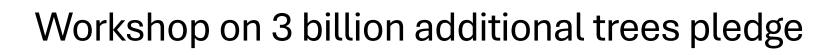
### EFNA website: www.efna.eu





**European Forest Nursery Association** 

**Building Forests** 



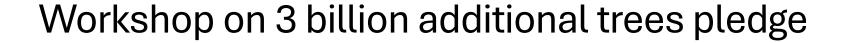


European Forests Nurseries Association (EFNA) do welcome the invitation to participate in the workshop.

As providers of plants to afforestation and forestation we are closely conected to the custumers like forest owners and other landowners as well as to the tree seed providers. An integrated link in the value chain of realizing plantings of trees.

EFNA is an organisation of national associations of forest nursery plant producers and traders. Today 14 countries have Delegates represented, and we are campaigning for including more countries. In many countries the forest nurseries are not organized at the moment, but we see progress in some countries on this.

In the development of the Pledge for 3 billion additional trees DG ENVI did contact EFNA to know if the nurseries would be able to extend the production capacity with additional 3 billion trees in the 10 years of the Pledge. The short answer were Yes – but on conditions





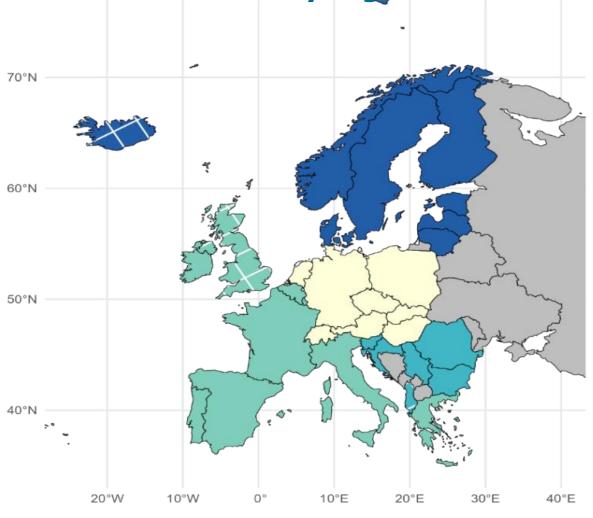
The forest nurseries are well prepared to contribute to the EU Green Deal.

The ownership of forest nurseries and the conditions for producing plants are different from country to country.

In the ongoing EU Horizon 2030 project OptFORESTS is a Survey to be published soon, which gives a well documented picture on the situation and the perspectives for the forest nurseries and tree seed providers.

Basically, Europe can be divided in 4 Regions.

**Methods: Definition of study regions** 



#### Production capacity of European forest nurseries

- Total capacity: around 2.4 to 3 billion plants per year (most nurseries are not producing at full capacity)
- 3 biggest producers: Poland, Sweden, Czech Republic – capacity of more than 1 billion plants
- Importance of natural regeneration decisive for intensity of plant production
- Planting density very important for number of plants deployed

Country	Forested area (1000 ha)	Naturally regenerated (1000 ha)	Proportion of artificial regeneration	Number of private nurseries	of public	Average annual plant production by private nurseries	Average annual plant production by public nurseries	Totals per country
Austria	3 899,15	2227,50	43%	111	5	16 000 000	5 700 000	21 700 000
Belgium	689,30	251,20	64%	40	_	50 000	50 000 000	
Bulgaria	3 893,00	3116,00	20%	23	151	n.a.	8 000 000	8 000 000
Croatia	1 939,11	1870,52	4%	0	20	0	10 000 000	10 000 000
Czechia	2 677,09	137,66	95%	228	6	222 455 000	9 000 000	231 455 000
Denmark	628,44	216,44	66%	40	_	40 000 000		40 000 000
Estonia	2 438,40	2222,66	9%	24	18	13 000 000	23 400 000	36 400 000
Finland	22 409,00	15040,92	33%	30	_	165 307 276		165 307 000
France	17 253,00	14819,00	14%	127	6	62 000 000		62 000 000
Germany	11 419,00	5709,50	50%	350	20	250 000 000		250 000 000
Greece	3 901,80	3762,90	4%	n.a.	n.a.	2 000 000		2 000 000
Hungary	2 053,01	1264,23	38%	600	-	200 000 000		200 000 000
Ireland	782,02	107,80	86%	13	1	20 000 000	20 000 000	40 000 000
Italy	9 566,13	8921,09	7%	110	42	4 000 000	2 000 000	6 000 000
Latvia	3 410,79	2945,35	14%	29	10	56 000 000	7 700 000	63 700 000
Lithuania	2 201,00	1590,00	28%	2	14	90 000	50 000 000	50 090 000
Luxembourg	88,70	58,70	34%	0	4	80 000		80 000
Netherlands	369,50	37,92	90%	111	-	20 300 000		20 300 000
Poland	9 483,00	1 706,94	82%	n.a.	1	430 000 000		430 000 000
Portuga1	3 312,00	1056,00	68%	277	-	33 000 000	_	33 000 000
Romania	6 929,05	6033,98	13%	450	320	9 000	000	38 000 000
Slovakia	1 925,90	1177,36	39%	92	16	70 000	000	70 000 000
Slovenia	1 237,83	1192,14	4%	4	-	1 265 000	-	1 265 000
Spain	18 572,17	15982,08	14%	1255	19	24 500 000		24 500 000
Sweden	27 980,00	14068,00	50%	12	-	400 00	0 000	400 000 000
Sum EU								2 253 797 000
Norway	12 180,00	12072	1%	-	6	-	44 456 000	44 456 000
UK	3 190,00	344	89%	n.a.	n.a.	90 000	0000	90 000 000
Iceland	51,35	11,79	77%	2	-	3 523 000	-	3 523 000
Switzerland	1 269,11	1119,96	12%	3	5	900	000	900 000
Serbia	2 722,65	2606,82	4%	30	55	5 000 000	10 000 000	15 000 000
Sum Non-EU								153 879 000
Total Europ	ie							2 407 676 000

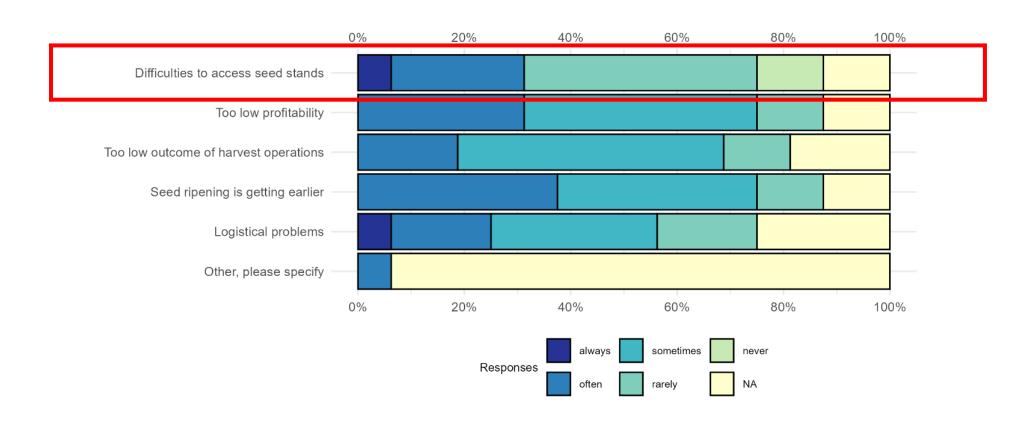
## Nursery production capacity – regional differences

- Northern Europe (n= 42)
   mean production: 13,8 Mio. plants
   90,5% container production
- Central Europe (n= 115)
  mean production: 2,8 Mio. plants
  86% bareroot production
- South-western Europe (n= 70)
  mean production: 2,4 Mio. plants
  55% bareroot production
- Eastern Europe (n= 52)
   mean production: 440 000 plants
   88,5% bareroot production

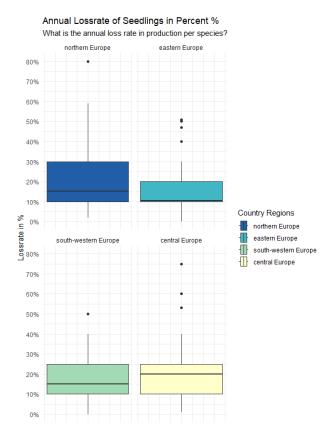


#### Results of online seed supplier survey:

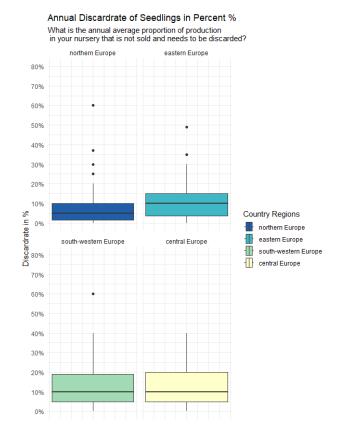
#### Challenges during harvest operations



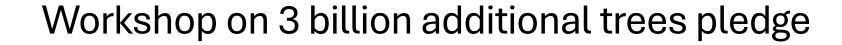
#### Seedling loss and discard rate



- → highest loss rate range in central and northern Europe
- → lowest range in eastern Europe



overall lowest discard rate in northern Europe reported

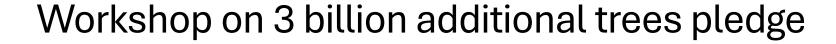




#### Discard of production

Subsidies must work on the real conditions for ordering and delivery in a flexible way, to be sure the wanted FRM are planted. Many obstacles can occur in the process from planning to planting.

In Denmark the period for use of the granting is now expanded to 3 years. This will besides securing the right FRM for the planting also diminish the discard of part the production in the nurseries. The best you can do is making orders on the specific provenance as early as possible. Also, the tree seed provider benefit when a demand is announced in good time.





More diversity for specific purposes and better adaptation

The expenses for getting approval of Basic Material, and the expenses of the yearly fee for keeping it approved are different in the countries.

When all expenses must be paid by the owner of the seed source, you see a tendency to keep only the most demanded provenances approved for harvest.

In Denmark this is now financed in a way which keep also Basic Material for a smaller marked approved, and this way more diversity is open for the marked. But again, it requires the planning and ordering is done in good time before the plants must be delivered.

#### Conclusions

- High diversity in production capacity and nursery ownership among regions
- Around 25% of the whole production are lost or have to be discarded
- 80% of nurseries see chance to expand production
- Most important challenges: production planning, seed supply, qualified
   staff
- Availability and administration of subsidies needs improvement
- Improved access to and better management of seed sources is needed