COST Action FP1203: European non-wood forest products (NWFPs) network

Task Force 3:Optimising co-production of NWFPs

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What was done...?

- Check for representation within TF3 from WG's
- Report on status quo and activities
- Explored the feedback fr
- Discussion on the plenar training school,..)
- Fixed responsibilities for publications)

Dr. Harald Vacik	Austria
Prof Maria Stoyanova	Bulgaria
Dr Mikko Kurttila	Finland
Prof Apostolos KYRIAZOPOULOS	Greece
Dr Gintautas Urbaitis	Lithuania
Mr Anne Oosterbaan	Netherlands
Dr K. Freerk WIERSUM	Netherlands
Mr. Iulian Danila	Romania
Mr. Lucian Dinca	Romania
Dr Sven Mutke Regneri	Spain
Ms Roser Melero	Spain
Dr Astrid Ballesta	Spain
Dr Juan Martínez de Aragón	Spain
Dr. Simon Egli	Switzerland
Dr Ibrahim Tumen	Turkey
Dr Jenny Wong	United Kingdom
Dr. Josip Culinovic	Croatia
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Introduction

- integrate the work from WGs: Identify management models for optimizing NWFP production under different forest management conditions
- Subtask 3.1: Reviewing current NWFPs management (M0-M21)
 - What expertise or models are being used?
 - Which are important NWFPs without proper management?
- Subtask 3.2: Towards a multifunctional management: managing NWFPs with other products (M6-M33)
 - How can the production of NWFPs be combined with wood production and/or other productions?
 - What are the trade-offs for a combined production?
 - How do environmental conditions (including climate change, biotic and abiotic threats) effect the management?
 - What are successful combinations of NWFPs ecosystem services within a particular socio-economic situation?





Introduction

- Subtask 3.3: Guidelines for NWFPs management (M18-M48)
 - compile and develop standardized silvicultural and management instructions enhancing NWFP productions as well complementary yield of wood and non-wood forest products – How?
 - Screening of existing management concepts (e.g. single tree oriented planting systems, age class systems, close to nature management systems) for their applicability for a combined production of NWFP and wood – Which?
 - focus only for a limited number of European NWFPs Which?





Activities in 2013/14

- Structuring review based on the discussions in Lisbon
- Review among TF3 members regarding
 - Actors in NWFP Management, Collection, Market & Sale
 - Regulations and provisions in NWFP Management and Collection
- Collecting reports on NWFP management (e.g. Turkey, Netherlands, Bulgaria, ..)
- Listing models / tools used to estimate production of NWFP
- Providing input for Database structure and common survey from TF3 perspective





Results - Property rights

Who owns the resource?

Country:	Lithuania	Finland	Netherlands	Austria	Greece	Spain
Trees	state/private	Land owner (Forest owner)	Landowner	Forest/Land owner	State	Land owner or renter
Forest plants	state/private	Nobody/woody plants are owned by the forest owner		Forest/Land owner	State	Land owner or renter
Birds	state	Nobody/Land owner owns a Nobody/Land	Free public good or hunting	there is no ownership until	State	
Wild animals (Roar deer, Red deer, Chamoix, rabbit,)	state property	Nobody/Land owner owns a hunting right if they are at his/her	Free public good	there is no ownership until they have been hunt down	State	
Bees and other insects	state (if alive in forests)	Nobody	Land or livestock owner	Bee Keeper	Private (bees) State (other incects)	Beekeeper
resin, wax, tannin and gum	private	Nobody, but if collected only forest owner is allowed to make	Beehive owner	Forest/Land owner	State	Land owner or renter
Fruit (Bilberries, Strawberries, Raspberries,)	state/private	Nobody	Landowner, contractor/ cultivator	Forest/Land owner	State	Land owner or renter
Nut/Seeds (Chestnuts, Pine kernels, Hazelnuts, Acorns,)	state/private	Nobody	Landowner, contractor/cultivat	Forest/Land owner	State besides Chestnuts (mainly private)	Land owner or renter
Shrubs, Flowers and ornamental plants	state/private	Woody plants: Forest owner, others: nobody	or Landowner, contractor/cultivat or	Forest/Land owner	State	Land owner or renter
Christmas Trees	state/private	Forest owner	Landowner/tenant	Forest/Land owner	Private	Land owner or renter
Mushrooms (Truffles,)	state/private	Nobody	Landowner	Forest/Land owner	State	Land owner or renter
Fodder	state/private	Nobody	Landowner	Forest/Land owner	State	Land owner or renter

Results – Management (i)

Who has the ability to manage NWFPs?

Country:	Lithuania	Finland	Netherlands	Austria	Greece	Spain
Trees	forest enterpr./forest owner	Forest/land owner	Landowner	Forest Manager + Forest owner	State	Land owner or renter
Forest plants	forest enterprise/forest owner	Forest/land owner		Forest Manager + Forest owner	State	Land owner or renter
Birds		Forest/land owner	Game management group	Forest Manager, Forest owner +	State – Union of hunters	Hunting right holder
Wild animals (Roar deer, Red deer, Chamoix, rabbit,)	hunters (who has right to hunt)	Forest/land owner	Game management group	Forest Manager, Forest owner + Hunters	State – Union of hunters	Hunting right holder
Bees and other insects	forest enterpr./forest	Forest/land owner	landowner and/or contractor	Forest Owner, Forest Manager + Bee Keener	Private (bees) State (other incects)	Land owner or renter
resin, wax, tannin and gum	forest enterpr./forest owner	Forest/land owner	Beehive owner	Forest Manager + Forest owner	State	Land owner or renter
Fruit (Bilberries, Strawberries, Raspberries,)	forest owner	Forest/land owner	landowner and/or contractor	Forest Manager + Forest owner	State	Land owner or renter
Nut/Seeds (Chestnuts, Pine kernels, Hazelnuts, Acorns,)	forest owner	Forest/land owner	landowner and/or contractor	Forest Manager + Forest owner	State besides Chestnuts (mainly private)	Land owner or renter
Shrubs, Flowers and ornamental plants	forest enterprise/forest owner	Forest/land owner	landowner and/or contractor	Forest Manager + Forest owner	State	Land owner or renter
Christmas Trees	forest enterprise/forest owner/landowner other land users	Forest/land owner	Landowner/tenant	Forest Manager + Forest owner	Private	Land owner or renter
Mushrooms (Truffles,)	forest owner	Forest/land owner	Mostly no management	Forest Manager + Forest owner	State	Land owner or renter
Fodder	forest enterprise/forest	Forest/land owner	Landowner/tenant	Forest Manager + Forest owner	State	Land owner or renter

Results – Management (ii)

Are any models/tools available and used that support management?

Country:	Lithuania	Finland	Netherlands	Austria	Greece	Spain
Trees	Forest Management Projects/special projects EU etc	There are many models and tools. Also guidelines for forest management No models and	Timber production models	Forest models, DSS- Tools	YES	There are, and some are even used.
Forest plants	no	tools. For some species there are brief guidelines on		None	NO	Sustainability measures only for certain species (e.g. Gentiana lutea,
Birds		Game birds: there are management		Monitoring Systems	YES	
Wild animals (Roar deer, Red deer, Chamoix, rabbit,)	depending on legal basis (e.g. Game Management Project)	are management Guidelines for game management for several game animals, some of	carrying capacity	Monitoring Systems	YES	
Bees and other insects	no	Management guidelines for bees.	carrying capacity	N/A	NO	
resin, wax, tannin and gum	no	Some models for resin production. Not commonly used.		equations	NO	Few, if any
Fruit (Bilberries, Strawberries, Raspberries,)	no	Models and tools for bilberry and cowherry do exist (in		N/A	NO	no
Nut/Seeds (Chestnuts, Pine kernels, Hazelnuts, Acorns,)	no	cowberry do exist (in Guidelines and models exist for seed production.		N/A	NO	Yes, and some are even useful
Shrubs, Flowers and ornamental plants	no	No models, tools or guidelines. (Some quidelines for willow There are guidelines		N/A	NO	no
Christmas Trees	no	for christmas tree production, but they are only used a		equations	YES	
Mushrooms (Truffles,)	no	Models under development/resear ch.		equations	NO	Yes, and some are even useful
Fodder	no	No models, tools or guidelines.		equations	YES but not in use	

Results – Management (iii)

Is there a training on management, harvesting, processing

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Country:	Lithuania	Finland	Austria	Greece	Spain
Trees	University/forest owners training	Forester (Master of agriculture and forestry): University of	professional education available (e.g. forest worker, forest warden, forester, etc.)	YES	
Forest plants	no (exception - Pharmaceutical field - University	Fastern Finland and Biology in University: Helsinki, Joensuu (Univ. of Eastern Finland), Jyväskylä, Oulu, Turku	professional education available (e.g. forest worker, forest warden, forester, etc.)	No but needed	Only in some regions (e.g. Catalonia: vocational training on the production of wild
Birds	University	Biology in University: Biology in University: Helsinki, Joensuu (Univ. Biology in University:	professional education available (e.g. forester, professional education	YES	
Wild animals (Roar deer, Red deer, Chamoix, rabbit,)	University/forest owners training	Helsinki, Joensuu (Univ. of Eastern Finland), Jyväskylä, Oulu, Turku	available (e.g. forester, graduate in forestry/wildlife	YES	
Bees and other insects	University	Biology in University: Helsinki, Joensuu (Univ.	professional education available (e.g. forester,	YES (bees only)	
resin, wax, tannin and gum	self-training, study kits	of Fastern Finland) Forester (Master of agriculture and forestry): University of Fastern Finland and	graduate in more or less traditional knowledge, eduction/training on	No	
Fruit (Bilberries, Strawberries, Raspberries,)	self-training	Fastern Finland and Forester (Master of agriculture and forestry): University of	nrocessing could be more or less traditional knowledge - should be fostered (e.g.	No	no
Nut/Seeds (Chestnuts, Pine kernels, Hazelnuts, Acorns,)	self-training	forestry): University of Forester (Master of agriculture and forestry): University of	management approaches for relevant	No	
Shrubs, Flowers and ornamental plants	self-training	Forester (Master of agriculture and forestry): University of Forester (Master of	regions could be mainly by-products of forest production - hence considered in	No	no
Christmas Trees	self-training, study kits	agriculture and	trainings available (e.g. association of christmas tree producers)	YES	
Mushrooms (Truffles,)	self-training	agriculture and forestry) : University of Eastern Finland and	collection / preparation of mushrooms are available at training	No but needed	
Fodder	no	Biology in University: Helsinki, Joensuu (Univ. of Fastern Finland)	considered in forest management - no need for further education	No but needed	

Results – Collection (i)

Who collects these products?

Country:	Lithuania	Finland	Netherlands	Austria	Greece	Spain
Trees	forest enterpr./forest owner	Fores owner	Landowner or contractor	Forest owner, Forest professional (e.g. harvesting company),	Loggers Unions	the owner himself, or an enterprise under contract for him, or a collector naving the owner himself,
Forest plants	forest visitors/forest owner	Plants can be collected in small amounts without causing harm if they are not on		Forest owner, Tree nurseries	Local communities	the owner himself, or a collector paying for it (or not, often
Birds		Birds which are by law on the game animals Animals listed as game	Game management group	Forest owner, Hunting pracitioner/s	Hunters	Hunting right holder
Wild animals (Roar deer, Red deer, Chamoix, rabbit,)	hunters	animal by law: fores owner/or a person to whom the hunting	Game management group	Forest owner, Hunting pracitioner/s	Hunters	Hunting right holder
Bees and other insects	forest enterpr./forest owner depending on SPECIESIII	Anyone: worms for fishing, some gasteronods and some Fores owner (the parts	Landowner or contractor	Bee Keeper	Bee keepers – Nobody	Beekeeper
resin, wax, tannin and gum	forest visitors/forest owner/personal & other companies	that are fallen into ground can be picked	Beehive owner	forest owner + Picker (with allowance)	Resin collectors	the owner himself, or a collector paying for it
Fruit (Bilberries, Strawberries, Raspberries,)	forest visitors/forest owner	hv.anvone) Anyone (fruits from trees can be picked by anyone, if they are	contractor or freely collected (wild)	forest owner, public (up to 2 kg/person/day	Local communities	the owner himself, or a collector paying
Nut/Seeds (Chestnuts, Pine kernels, Hazelnuts, Acorns,)	forest visitors/forest owner	Forest owner (nuts/cones from trees can be picked by	contractor or freely collected (wild)	forest owner, public (up to 2 kg/person/day	Local communities besides chestnuts	or a collector paying for it
Shrubs, Flowers and ornamental plants	forest visitors/forest owner	Woody plants: fores owner (the parts that are fallen into ground	contractor or freely collected (wild)	forest owner, public (if not prohibited by the forest owner and/or	Local communities	the owner himself, or a collector paying for it
Christmas Trees	forest enterprise/forest owner/landowner other land users	Fores owner	Landowner/tenant	Forest owner	Private	the owner himself, or a collector paying for it
Mushrooms (Truffles,)	forest visitors/forest owner	Anyone (without causing damage, no protected species)	contractor or freely collected (wild)	forest owner, public (up to 2 kg/person/day allowance)	Local communities	or a collector paying for it (or not, often
Fodder	forest owner/hunters	Forest/land owner	Landowner or contractor	forest owner, third parties with grazing/pasture rights	Nobody – Grazing only	the owner himself, or a herdman (paying for it, or

Results – Collection (ii)

Who has the authority to do check the harvesting amounts?

Country:	Lithuania	Finland	Austria	Greece	Spain
Trees	Ministry of Environment/its regional Departments	The Finnish Forest Centre (Metsäkeskus), police	Forest owner, public authorities (according to harvesting plans, allowable appual cut)	STATE	Public forest administration
Forest plants	Ministry of Environment	Official authority (police) may step in in case everymans' rights are violated	Forest owner, Tree nurseries (i.e. owner)	STATE	Public forest administration*
Birds		Hunting inspector,The Finnish Wildlife Agency,	public authorities (according to provincial	STATE, Hunters Unions	Public forest administration*
Wild animals (Roar deer, Red deer, Chamoix, rabbit,)	Ministry of Environment/its regional Departments	Hunting inspector,The Finnish Wildlife Agency , police	public authorities (according to provincial shooting plans)	STATE, Hunters Unions	Public forest administration*
Bees and other insects	Ministry of Environment	Official authority (police) may step in in	Bee keeper	PRIVATE for bees	Public forest administration*
resin, wax, tannin and gum	Ministry of Environment	Police, The Finnish Forest Centre (if wood related)	forest owner	STATE	Public forest administration*
Strawberries, Passpharries	Ministry of Environment	Official authority (police) may step in in	forest owner, public authorities	STATE	Public forest administration*
Nut/Séeds (Chestnuts, Pine kernels, Hazelnuts,	Ministry of Environment	case everymans' rights Official authority (police) may step in in case everymans' rights	forest owner, public authorities	STATE	Public forest administration*
Shrubs, Flowers and ornamental plants	Ministry of Environment	The Finnish Forest Centre (if wood related) Official authority	forest owner, public authorities (according to nature protection)	STATE	Public forest administration*
Christmas Trees	Ministry of Environment/ Ministry of Agriculture	The Finnish Forest Centre (if wood related)	Forest owner, Tree nurseries (i.e. owner)	Private	Public forest administration*
Mushrooms (Truffles,)	Ministry of Environment	Official authority (police) may step in in case everymans' rights are violated	forest owner, public authorities	STATE	Public forest administration*
Fodder	Ministry of Environment	Official authority (police) may step in in case everymans' rights	forest owner, "Alpsinspektor"	STATE	Public forest administration*



Results - Collection (iii)

What are the regulations in collecting?

Country:	Lithuania	Finland	Netherlands	Austria	Greece	Spain
Trees	Forest Law, oth. Post- legislative acts	Forest Act (1996/1093) Section 5 - Felling of the tree stand (1) Felling may be performed the Nature Conservation Act	governmental harvesting permits	according to Forest Law (e.g. no large clearcuts > 0,5 ha in protection forests; no clearcuts > 2.0 ha in all		Laws and reglaments (several)
Forest plants	Forest Law, Law of Protection of Willd Plants, Rules on collection of medical plants,	1096/1996 Section 42 Protection of plant species		according to Forest Law, Nature Protection Acts		(several in general terms (forest law)). In some regions and only for certain species,
Birds		The Hunting Act (615/1993) Section 5 – Game animals	governmental conservation & hunting laws	according to Hunting Laws (Provincial), Nature		Laws and reglaments (several)
Wild animals (Roar deer, Red deer, Chamoix, rabbit,)	Hunting Law, Hunting rules, Wildlife Law, Law on Protected animal, plant, fungi species; EU Directives	Section 5 – Game animals The Hunting Act (615/1993) Section 5 – Game animals and unprotected animals (1) Game animals include: 1) rabbit mountain hare	governmental conservation & hunting laws	according to Hunting Laws (Provincial), Nature Protection Acts (e.g. Natura 2000)		Laws and reglaments (several)
Bees and other insects	Wildlife Law	The protected species list in Nature Conservation Degree	animal health laws	(Provincial) Laws on apiculture		Laws and reglaments (several)
resin, wax, tannin and gum	Forest Law, post-legislative regulations	114.2 1997/160) (33 species) The Penal Code 769/1990, Chapter 28, Section 14 Everyman's right		Forest law, Nature Protection Acts		Laws and reglaments (several)
Strawberries,	Forest Law, Rules of visiting in forests	The legal restrictions in this The Nature Conservation Act 1096/1996 Section 14		Forest law, Nature Protection Acts		Laws and reglaments (several), but sometimes not actually applied (low
Nut/Séeds (Chesthuts, Pine kernels, Hazelnuts,	Forest Law, Rules of visiting in forests	The Nature Conservation Act 1096/1996 Section 14 The Nature Conservation Act		Forest law		Laws and reglaments (several)
Shrubs, Flowers and ornamental plants	Forest Law, Rules of visiting in forests	The Nature Conservation Act 1096/1996 Section 14 Forest Act (1996/1093)	commercial sale through cooperative auction system	Forest Law. Nature Protection Law		Laws and reglaments (several), but sometimes not actually applied (low
Christmas Trees	Forest Law, oth. Post- legislative acts	Forest Act (1996/1093) Section 5 - Felling of the tree stand (1) Felling may be performed in wather which warmer which		Forest Law, on Plantations regulations from Agricultural sector		Laws and reglaments (several)
Mushrooms (Truffles,)	Forest Law, Rules of visiting in forests. Rules on Mushromm gathering	1096/1996 Section 14 Without prejudice to the		Forest Law		Laws and reglaments (applied more to trade rather than collecting)
Fodder	Forest Law, Rules of visiting in forests	The Nature Conservation Act 1096/1996 Section 14		Forest Law		Laws and reglaments (several)



Results – Market and Sale (i)

Who takes the product to the market?

Country:	Lithuania	Finland	Netherlands	Austria	Greece	Spain
Trees	forest enterpr./forest owner/intermediary companies	Forest owner or a company with whom the forest owner has a	Harvestor	Forest owner, Forest professional (e.g. harvesting company), Forest association	Loggers Unions	the collector, his cooperative or a storer/trader
Forest plants	forest visitors, forest owners/companies	The picker		Forest owner, Tree nurseries	Local communities	a storer/trader
Birds		The hunter	harvestor	Forest owner, Hunting pracitioner/s,	Nobody	the hunter, if any
Wild animals (Roar deer, Red deer, Chamoix, rabbit,)	hunter/company	The hunter	Harvestor	Forest owner, Hunting pracitioner/s, Processor, Retailer	Nobody	the hunter, if any
Bees and other insects	forest owner/visitor	The picker	Harvestor	Bee keeper, Processor	Bee keepers – Nobody	the beekeeper, his cooperative or a storer/trader
resin, wax, tannin and gum	forest visitors/forest owner/personal & other companies	The forest owner/picker	Harvestor	Forest owner, Processor	Resin collectors	the collector, his cooperative or a storer/trader
Fruit (Bilberries, Strawberries, Raspberries,)	forest visitors/forest owner/personal & other companies	The picker	Harvestor	Forest Owner, Processor, Retailer	Local communities	mainly local consumption, few trading (local)
Nut/Seeds (Chestnuts, Pine kernels, Hazelnuts, Acorns,)	forest visitors/forest owner/personal & other companies forest visitors/forest	The forest owner/picker	Harvestor	Forest Owner, Processor, Retailer	Local communities besides chestnuts	trading (local) the collector, his cooperative or a storer/trader the collector,
Shrubs, Flowers and ornamental plants	forest visitors/forest owner/personal & other companies forest enterpr./forest	The forest owner/picker	Harvestor	Forest owner, Retailer	Nobody	the collector, his cooperative or a storer/trader
Christmas Trees	owner/landowners /other land users/ intermediary	Forest owner or a company with whom the forest owner has a contract	Harvestor	Forest owner	Private	the collector, his cooperative or a storer/trader
Mushrooms (Truffles,)	forest visitors/forest owner/personal & other companies	The picker	Harvestor	Forest owner, Public, Processor, Retailer	Nobody	the collector, his cooperative or a storer/trader
Fodder	forest owner/hunters	The forest owner/picker	Harvestor	N/A	Nobody	Consumption is mainly in situ by grazing

Results – Market and Sale (ii)

Who has an interest in these products?

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Country:	Lithuania	Finland	Netherlands	Austria	Greece	Spain
Trees	society (private & legal persons or JS companies)	The Finnish Forest Research Institute (Metsäntutkimuslaito	timber sector	Owners, Processors (wood industry), Retailers, Policy makers, NGOs	Loggers, State, Industries	
Forest plants	society, private & legal persons or JS companies	The Finnish Forest Research Institute (Metsäntutkimuslaito s) The Ministry of		Owners, Retailers, Practitioners, Consumers (i.e. Forest Owners again)	Local communities	forest use, cosmetic and pharmaceutical industries
Birds		Finnish Game and Fisheries Research Finnish Game and	hunters, culinary sector	Forest/Land Owners, Hunting Practitioners, Forest/Land Owners,	Hunters, State, NGOs	
Wild animals (Roar deer, Red deer, Chamoix, rabbit,)	society (family, public catering, JS companies)	Fisheries Research Institute (RKTL) The Finnish Wildlife	hunters, culinary sector	Hunting Practitioners, NGOs (e.g. Nature conservation),	Hunters, State, NGOs	
Bees and other insects	landowners/ companies	The Ministry of Forestry and Agriculture (MMM)	biological products & culinary sector	Forest/Land Owners, Bee Keepers, Forest protection, NGOs	Bee keepers – Nobody	
resin, wax, tannin and gum	society, private & legal persons or JS companies	Agriculture (MMM) The Finnish Forest Research Institute (Metsäntutkimuslaito	biological products sector, farmers profiting from bee	Forest Owners, Processors, Consumers	Resin collectors, State	cosmetic industries
Fruit (Bilberries, Strawberries, Raspberries,)	society (private & legal persons or JS	The Finnish Forest Research Institute	niche marketeers, horticultural sector,	Forest Owners, Processors, Retailers,	Local communities, State	mainly local consumption, few trading (local)
Nut/Seeds (Chestnuts, Pine kernels, Hazelnuts, Acorns,)	companies) society (private & legal persons or JS companies)	(Metsäntutkimuslaito Does not exist in Finland, some may collect seeds (cones)	niche marketeers, horticultural sector, recreationists	Consumers Forest Owners, Processors, Retailers, Consumers	Local communities, State	
Shrubs, Flowers and ornamental plants	society (private & legal persons or JS companies)	The Finnish Forest Research Institute (Metsäntutkimuslaito The Finnish Forest	niche marketeers, horticultural sector,	Forest owner, Retailer, Consumers	State	
Christmas Trees	society (private & legal persons or JS companies)	Research Institute (Metsäntutkimuslaito s) The Minist Forest	horticultural sector	Forest owner, Retailers, Wholesalers, Consumers	Private	
Mushrooms (Truffles,)	society (private & legal persons or JS companies)	Research Institute (Metsäntutkimuslaito s)	niche marketeers, recreationists	Forest owner, Processors, Retailers, Consumers	Local communities	collectors, traders
Fodder	hunter associations/ landowners	Fodder from the forest is not very	ecologically oriented animal keepers	Forest owner, consumer (i.e. the	Livestock farmers, State	

Expected Outputs (i)

- Contribute to online database of European NWFPs
- Contribute to design of common survey
- Contribute chapters to the book "Sustainable management of European non-wood forest products"
 - State of the Art Report based on Survey from TF3
 - Document existing examples for co-production of NWFPs
 - Demonstration of general opportunities for co-production
 - Identify differences for particular socio-economic and climatic conditions
- Contribute to the proceedings of the final international conference with presentations of TF3 members





Other topics of interest...

- Conside scale of management (stand, FMU, regional, national)
- Consider kind of management systems (Agroforestry, close to nature, plantation systems,...)
- Explore origin of NWFPs (urban areas, agroforests,...)
- Identify innovations in management with respect to ongoing changing environmental and socio-economic conditions
- Describe current and future threats for the management of NWFPs
- Identify needs in improving inventory and monitoring systems



Expected Outputs (ii)

- members have interest to work on a publications / reviews of European NWFP management (in peer-reviewed scientific journals)
 - 1) Identifying magnitude of influence of the production of NWFPs on the provision of ecosystem services (FMU level) (Mikko)
 - 2) Identifying the impact of climate change, biotic and abiotic threats on the production of NWFPs
 - (cork, mushrooms, pine nuts) (Sven & Jose-Antonio & Joana)
 - Understory in Greece / Medit. (Apostolus)
 - 3) Identifying successful combinations of NWFPs and ecosystem services within a particular socio-economic situation (Harald & all interested TF3 members)
 - 4) Exploring the applicability of livelihood strategies in the tropics for European systems (Jenny & Freek)

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Propose STSM's to work on this issues





Topics for Training School

What are needs for "TF3 researchers"?

- Thematic focus (innovations, management,..)
- Geographical context (medi, boreal, central..)
- Products perspective (mushrooms, ..)
- Methodological approach (trade off analysis, models, integrating techniques for co-production of NWFPs
- Value chain perspective (production, collection, processing, marketing)
- Supporting a natural resource manager in proposing a certain mix of NWFPs for land owner





Next steps

- Refine questions and attributes from TF3 for Survey / online database based on feedback (Harald & Jenny) – end of April 2014, Feedback from TF3 members by end of May 2014
- Negotiate with other WGs and TFs the outline of the survey (Harald & Jenny) - end of June 2014
- define topics and partner institutions for STSMs (all TF3 members by end of May 2014)
- Propose an outline for publication topics (nominated authors by end of November 2014)









