

Human Health and Well-being in the Forest

Background

5 years after launching its Ecosystem Services (ES) Procedure¹, the Forest Stewardship Council® will initiate soon the revision process of this important normative document (after a minor revision and update in 2019).

Contrary to the expectations of quite a few certification practitioners, the ES procedure had a good uptake by the forest industry, even if it was perceived as complex from an implementation perspective.

Over the last few years, ASTRAcademy offered various courses to certification practitioners on Ecosystem Services under the FSC® standard. Additionally, since last year, ASTRAcademy took the lead on exploring whether new forest-based activities and services could be considered as eligible under the scope of FSC's Ecosystem Services procedure.

Together with colleagues from FSC Italy, the University of Padua, CSI (an Italian FSC-accredited certification body), Etifor, and experts in "forest therapy", "forest bathing" and "bioenergetic landscapes", with the kind support of the Magnifica Comunità di Fiemme (the first FSC FM certified operation in Italy more than 20 years ago, located in the Italian Alps) we explored the feasibility of Human Health and Well-being (HHWB) activities being considered as a new ecosystem service in the FSC ES procedure. During this process we had to clarify quite a few concepts and find answers to quite a few key questions.

This initiative is a collaboration between an FSC National Office (Italy), various FSC members, (organizations like ASTRAcademy and also individual members), including other interested stakeholders, with the purpose of "invigorating certification to drive the spread of forest stewardship by making it attractive, usable and viable for potential users", as described in the FSC Strategy 2021-2026. We consider this initiative as a very good example of co-creation, as described Strategy 1: "Co-create and implement forest solutions" (see Forest Stewardship Council® [Global Strategy 2021-2026](#), Demonstrating the value and benefits of forest stewardship).

At the onset of this project, together with FSC Italy, we informed FSC about our initiative and invited our colleagues from FSC International to participate in our project. Since this was perceived as the early stage in a longer process, FSC staff responsible for Ecosystem Services welcomed our initiative and asked us to keep them updated about our progress, which we have done on several occasions over the last year.

¹ FSC-PRO-30-006 V1.2

Methodology

The method used for identifying the potential of Human Health and Well-being to become an Ecosystem Service under the FSC standard was the one developed and promoted by the [Forest Therapy Hub](#).

The FTHub Method is a practical tool for designing mindful nature connection activities and planning them in various sequences to promote nature connectedness under the theoretical principles of human-nature interaction, scientific evidence and the conceptual framework of Planetary Health. Over the last few years, the FTHub has brought a key contribution to the development of a widespread professional Forest Bathing Guides and Forest Therapy professionals network around the world.

While activities such as forest bathing and forest therapy have been practiced for a long time (e.g. Shinrin-Yoku practiced in Japan since the 80's), some important recent publications were used as a theoretical basis and practical reference for our initiative. This includes the following publications:

- The book “The Secret Therapy of Trees” by Marco Nieri and Marco Mencagli, 2020 (Marco Nieri is a key member of our initiative)
- The article “Selection and mapping of adequate sites and plan for the forest bathing practice in the territory of the Monte Sibillini National Park”, by Marco Mencagli, 2020.
- The book “Forest Therapy – a collaboration between the Italian Alpine Club and the Italian National Research Council”, by Francesco Meneguzzo and Federica Zabini, 2020.

Considering these publications, the approach taken involves multiple factors as “key” for defining or characterizing aspects of Human Health and Well-being. This includes measurable parameters such as the presence of monoterpenes emitted by certain tree species (e.g. some conifer species and beach trees), the presence of ionized air in the areas adjacent to water courses and cascades, and also many other aspects such as the beauty of a forest landscape or of a forest path, the diversity and complexity of the forest ecosystems and their impact on physical and psychological parameters.

Key questions

At the onset of our activities last year we had a lot of questions and just a few answers, so we had to work together, discuss, debate and come up with numerous clarifications and solutions around the feasibility of having Human Health and Well-being as an ecosystem service under the FSC Standard.

These were some of the questions we asked ourselves:

- Can Human Health and Well-being be considered as an Ecosystem Service under the FSC Ecosystem Services Procedure?
- If the answer is “yes”, what would be the difference to the existing ES category “Recreational Services”, what should be the additional elements and requirements to be considered?
- What would be the relevant impact indicators to be developed in this context?

- ☑ What is the scientific evidence that can justify and back up such indicators?
- ☑ What should a forest manager do to identify and manage forest areas that are suitable for these activities?
- ☑ How should an auditor evaluate compliance by the forest manager with the identified indicators, and how should the certification body insert this into its management systems?
- ☑ How can the wide range of aspects relating to well-being in the forest be translated into indicators that can be evaluated during a certification process, based on objective evidence?
- ☑ What should be the subject of a certification evaluation in this context? The quality of the areas identified by the forest manager, the quality of the service provided by the forest management, the management activities proposed and implemented in order to maintain or improve these areas, or a mix of all these aspects?

As of today, the outcome of our work is a couple of documents that describe at systems level the requirements for identifying and managing forest areas with Human Health and Well-being being the main objective. This includes a detailed list of indicators that can be used to identify areas that are suitable for activities relating to Human Health and Well-being in the forest (including references to research and publications that back-up these indicators), and a hierarchy of indicators that distinguishes between indispensable indicators, key indicators that characterize HHWB (beyond requirements relating to recreational services as described in the FSC ES procedure), quality indicators, and supporting indicators.

Field testing in the forest

Once we felt confident that the proposed indicators were sufficiently well developed, the next step was to pilot test the result of this process in the forest. This took place, on 22 April 2022, the day of the Earth, with follow-up work on the next day, in the forest areas of the Magnifica Comunità di Fiemme, located in Italy's Trentino province.

Prior to our pilot test in the forest, the staff at the Magnifica identified and prepared several areas that were considered suitable for HHWB activities, responding to the elements highlighted in the proposed indicators. This was done with support from a professional who was previously trained as Guide following the method promoted by the Forest Therapy Hub (FT Hub).

The field test showed us that areas that are suitable for HHWB activities can be identified in the best way through a close collaboration between forest managers and professional Guides, adequately trained and with very good knowledge of the local conditions. In addition to the availability of the local professional guide, during our pilot test in the forest we had the privilege to have in our working group Marco Nieri, the Italian representative of the Forest Therapy Hub, involved also in training activities for forest therapy and forest bathing Guides.

The availability of both types of expertise, and the availability of more than 200 Km of paths in the forest areas managed by the Magnifica Comunità di Fiemme helped a lot to identify suitable areas, test and apply the agreed indicators and formulate concrete and specific

management activities that the forest manager is expected to implement in order to reach compliance with the proposed standard.

Since some members of our group had no previous exposure to forest bathing and forest therapy, during our two days in the forest, in order to get a feeling of the type of activities that are being implemented in this context, we had a couple of short sessions illustrating how we can use all our senses to become better connected with the forest ecosystem and with ourselves. This has also clarified in our minds some of the characteristics the forest stand must have in order to qualify as an area suitable for forest bathing, justifying the indicators we had previously developed for this purpose.

Our field test confirmed that practicing activities in the forest that are conducive to health benefits involves additional requirements when compared with recreational services, an ecosystem service that is currently included in the FSC ES procedure from 2017. Many indicators considered relevant for Human Health and Well-being in the forest, referring to both identification of suitable areas and the management of such areas, are very specific. In our view they require the establishment of a new ecosystem service.

For example, forest paths suitable for forest bathing and forest therapy need to be easily accessible and have at least some open areas where a group could sit or stand in circle for certain guided activities. Additionally they need to have lateral accessibility to the adjacent areas, allowing users to explore the area on their own, and have a good variability in terms of structure and visual characteristics, with the presence of water being an important additional benefit. While these are key features for activities relating to Human Health and Well-being in the forest, they are not specifically required in the context of the “recreational services”, an ecosystem service that could be currently used just as a proxy for HHWB in the absence of a separate ES category.

Next steps

Following up on the field work, we are now updating the documentation produced, taking into account our experience during the recent field test that sought to evaluate the feasibility of the identified indicators in the context of the forest areas we visited at Magnifica Comunità di Fiemme.

Once the revision process of FSC’s Ecosystem Services procedure starts later this year, based on the experience acquired over the last year, we will make available our learning experience and the results we obtained so far to this revision process and propose to FSC to include Human Health and Well-being as a new ecosystem service to be promoted and adopted on a wider scale in the FSC system through the revised version of the ES procedure.

The process implemented so far generated quite a few important insights and was rich in terms of “lessons learnt”. Using this valuable process, ASTRAcademy will also develop specific training for certification professionals on the new ecosystem service, based on the experience gained so far in this area.

From the perspective of the forest managers at the Magnifica Comunità di Fiemme, where we conducted our pilot test in the forest, Human Health and Well-being in the forest represents an important opportunity to diversify the range of certified ecosystem services this Forest Management Unit is already providing under the scope of their FSC FM/COC certificate. They will launch this within weeks as a new ecosystem service regardless of its certification status, preferable embedded in their certification scope, but also without having this new service offer endorsed through the FSC standard if this will not be possible within a short time. This raises a new question, that of the claims that can be made at this stage in relation to this new ES.

The process implemented over the last year in relation to Human Health and Well-being in the forest shows once more that the FSC network and its partners, including certification bodies, auditors and certificate holders are the key driving engine for the development of the FSC Normative Framework, for driving change, innovation and for generating additional positive impacts.