

Analysis of present situation in the field of mental and sustainable tourism in the South Baltic Region: needs, benefits, deficiencies, best practices



Žvejonių Ecological Club

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Cover image: Børup (a sustainable mental convalescence resort), Jutland, Denmark (Credit: Ramūnas Povilanskas)

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EXECUTIVE SUMMARY

Apitherapy tourism, also referred to as apitourism or bee-therapy tourism, focuses on health and wellness experiences derived from bee products and practices. This niche combines the therapeutic applications of substances such as honey, propolis, pollen, royal jelly, beeswax, and bee venom with various tourism activities. Offerings can include immersive stays in apiaries, educational experiences, tastings of honey and other bee products, specialised massages involving bee products, inhalation therapies using hive air, and managed treatments involving bee venom. As an emerging segment within the broader wellness tourism industry, apitherapy tourism presents opportunities to diversify rural economies, enhance local beekeeping initiatives, and strengthen nature-based tourism offerings. This sector integrates themes of natural health, rural development, cultural heritage, and biodiversity conservation.

Despite its potential appeal and economic benefits for rural and coastal regions, the responsible growth of apitherapy tourism necessitates the establishment of clear safety standards, comprehensive training programmes, and evidence-based protocols. Specific modalities, particularly those involving bee venom and hive-air inhalation, pose safety and regulatory challenges that must be navigated carefully. This report examines the definition of the sector, the specific regional context of the South Baltic area, and the various needs and benefits associated with this type of tourism. It discusses shortages in the sector and recommends best practices to ensure safe and credible development.

Apitherapy tourism has the potential to diversify income sources for rural communities, enhance wellbeing tourism offerings, and foster greater public awareness regarding the conservation of pollinators. Achieving this will require the implementation of robust safety regulations, quality assurance processes, effective marketing strategies, training, and coordinated efforts across different sectors. The South Baltic coastal region showcases various wellbeing tourism initiatives and boasts a solid foundation in beekeeping creating an advantageous environment to expand apitherapy tourism. However, challenges related to medical oversight, regulatory compliance, and environmental sustainability still exist. Key actions recommended include establishing health and safety accreditation systems, enhancing the skills of beekeepers and therapists, including apitherapy offerings into coastal wellness programmes.

Birdwatching tourism, also known as birding or avitourism, focuses on the observation, photography, and study of wild birds and their natural habitats. This specialised form of nature-based tourism is experiencing rapid growth and offers substantial economic opportunities while promoting sustainability. When managed effectively, birdwatching tourism generates income for local communities and plays a crucial role in extending visitation during off-peak seasons while contributing to the biodiversity conservation. The sector includes wildlife observation, habitat interpretation, guided excursions, and ancillary services such as accommodations, transportation, and local product offerings. It enhances the experience for birdwatchers while creating a positive impact on the environment and local economies.

Particularly in the South Baltic coastal region there are significant opportunities for avitourism development. It is home to vital coastal wetlands, lagoons, and migration bottlenecks, such as the Curonian Spit, Vistula Lagoon, and Pomeranian Bay, making it a prime location for birdwatching. The presence of internationally recognised stopover, breeding, and wintering sites offers an ideal foundation for a coordinated cross-border birdwatching initiative. To harness the potential of birdwatching tourism while safeguarding ecosystems, it is essential to ensure careful planning. It includes establishing appropriate site infrastructures, implementing effective visitor management strategies, providing training programmes for guides, and establishing robust governance structures. Additionally, compliance with environmental protection regulations must be prioritised to reduce disturbances to bird populations.

Investments in these areas can lead to extended tourism seasons, increased local expenditures, and funding for conservation initiatives. However, success hinges on the implementation of ethical codes of conduct, strong monitoring practices tied to conservation objectives, and transboundary cooperation to ensure that the needs of both bird populations and tourists are met. Ultimately, the responsible development of birdwatching tourism has the potential to diversify coastal economies, enhance visitor experiences, and support the preservation of natural habitats. This can be achieved through strategic planning that includes clear zoning, effective visitor management, capacity building for local guides and protected area managers, and consistent monitoring to uphold both ecological integrity and the quality of the visitor experience.

Enotourism, which focuses on wine and vineyard-related experiences, has the potential to serve as a complementary strategy to traditional mental health services when it is thoughtfully designed. By integrating natural, cultural,

and wellness elements, wine therapy can transform into an effective, low-intensity system tailored for mental rejuvenation. This approach encompasses a range of tourism offerings and localised experiences designed to alleviate stress, enhance subjective wellbeing, and promote healthier lifestyle habits through sensory engagement, social interactions, and immersion in natural environments.

When strategically positioned as a system for mental rehabilitation, wine therapy tourism can incorporate diverse vineyard activities along with landscapes that feature coastal and green-blue elements. This blend not only provides psychosocial advantages but also stimulates economic growth within the community. Specifically, this system can bring together low-intensity exposure to nature, organised restorative pursuits, safe social interactions, light physical activities, and curated culinary and wine experiences. Such a framework supports individuals grappling with stress, burnout, and mild-to-moderate mental health challenges.

The South Baltic coastal region is witnessing a budding interest in viticulture and winery tourism. It is well-positioned to cultivate these offerings thanks to its accessible coastline, the emergence of boutique wineries, and the availability of EU funding initiatives. To fully harness this potential, it is necessary to implement a coordinated regional policy that encompasses infrastructure development, product design, and robust safety and public health measures, as the consumption of alcohol can present genuine health risks. Furthermore, establishing ecologically and socially sustainable viticulture practices, along with effective visitor management strategies, is crucial.

Achieving meaningful mental health benefits through wine therapy tourism and hospitality can create job opportunities, diversify income for rural communities, and enhance regional appeal, if planners actively address challenges such as seasonality and climate-related constraints. A framework that relies on evidence-based therapeutic design is paramount to avoid the pitfalls of medicalising alcohol consumption. This includes building the necessary infrastructure and forging cross-sector partnerships among tourism, healthcare, and environmental stakeholders, as well as implementing monitoring systems that assess both mental wellbeing outcomes and sustainability.

Critical components for success in this endeavour include facilitating cross-border funding and planning initiatives, establishing training and certification programmes, developing diverse year-round offerings, and forming formal partnerships between wineries, wellness providers, and local health services. By leveraging the region's coastal and rural resources, alongside its evolving wine and gastronomy scene, and utilising EU funding mechanisms, a comprehensive wine therapy tourism system can arise in the South Baltic coastal area. However, this requires addressing limitations related to seasonality, infrastructure gaps, the need for specialised training, and the creation of medical-tourism collaborations, all while establishing criteria for measuring desired outcomes.

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1. INTRODUCTION

STUDY'S RATIONALE

Mental and Sustainable Mindscapes - raising awareness & competences of benefits of inter-secting mental wellbeing and environmentally friendly tourism in the SB region) is a small-scale cross-border collaboration project partly sponsored by the Interreg South Baltic 2021-2027 Programme. The project involves partners and associated partners from Poland and Lithuania. The overall project objective is to support tourism operators and facilities, NGOs, public organisations, and decision makers in the coastal regions of Germany, Denmark, Sweden, Lithuania, and Poland to improve their awareness and practices. The main target groups are SMEs of the tourism sector, DMOs, public institutions, non-governmental organizations (NGOs), tourists, local communities, and inhabitants, both lay people and professionals of the littoral regions of the South Baltic Area.

Mental and Sustainable Mindscapes project partners strive to actively engage SMEs that either currently provide or have the potential and desire to offer mental and sustainable tourism and related services to visitors seeking to enhance their physical, emotional, mental, and overall wellbeing, especially in the post-COVID era facilitating the restoration of their mental health. Project outputs aim to achieve several key results leading to the sustainable development of the South Baltic Area. The project objective is the development and implementation of the mental and sustainable tourism certification programme for the South Baltic Region

The certification programme includes tools and methodology developed within the framework of cross-border cooperation. In the first stage, which is the subject of this small-scale project, the project partners develop, implement and test practically the common operating methodology and the online self-evaluation tool.

The certification programme will include tools and methodology developed within the framework of cross-border cooperation. In the first stage, which is the subject of this small-scale project, the project partners intend to develop, implement and test practically the common operating methodology and the online self-evaluation tool for target groups. The certification programme will require the businesses to undergo regular assessments to maintain certification status. In this way, operators will be motivated to constantly maintain high quality and/or introduce new innovative solutions in the field of mental and sustainable tourism. Hence, this tiny project adopts an ambitious holistic and comprehensive approach that covers numerous aspects of mental and sustainable tourism, which, has emerged as a prominent

sector within the travel industry, emphasising the need to connect with the environment for mental healing and convalescence.

DEFINITIONS

As the demand for unique and enriching travel experiences grows, it becomes increasingly vital to establish precise definitions and frameworks for mental and sustainable tourism rooted in nature. These definitions serve as a foundation for sustainable practices that benefit tourists and local communities, especially in the context of rising global interest in mental health and wellbeing. Understanding the essence of mental and sustainable tourism can help stakeholders effectively promote and manage these experiences. Furthermore, precise definitions are of utmost importance; they foster collaboration among tourism operators, mental health professionals, environmentalists, and policymakers, ensuring that the development of mental and sustainable tourism offers respects both ecological integrity and cultural values. This introduction connects the definitions of "mental and sustainable tourism" for a comprehensive exploration of mental and sustainable tourism offer models, addressing the critical and essential need for clarity and intentionality in this socially significant domain.

Mental convalescence refers to the process of psychological recovery and restoration following periods of stress, illness, or emotional exhaustion. Much like physical convalescence after medical treatment, it emphasizes rest,

balance, and gradual healing of the mind. This process can involve activities that reduce anxiety, restore focus, and promote emotional well-being, such as meditation, time in nature, or other therapeutic practices. The goal is to regain mental clarity and resilience, allowing individuals to return to daily life with renewed strength.

Closely related to this concept is *relaxation tourism*, a form of travel designed specifically to support rest and recovery from the pressures of modern living. Unlike adventure or cultural tourism, relaxation tourism focuses on environments and experiences that promote calmness, serenity, and rejuvenation. Examples include wellness retreats, spa vacations, seaside resorts, or visits to tranquil rural settings. These experiences are often structured around slow-paced activities, healthy lifestyles, and immersive natural surroundings that foster both physical rest and psychological renewal. Together, mental convalescence and relaxation tourism highlight the importance of intentional rest in maintaining mental health. In a world where stress and burnout are increasingly common, they serve as pathways to restore balance, nurture emotional stability, and enhance overall quality of life.

Sustainable tourism is a concept that covers the complete tourism experience, including concern for economic, social, environmental issues and attention to improving tourists' experiences and meeting the needs of host communities. Hence, sustainable tourism embraces concerns for environmental protection, social equity, and quality of life, cultural diversity, and a dynamic, viable economy delivering jobs and prosperity for all. It has its roots in sustainable development and there can be some confusion as to what "sustainable tourism" means. There is now broad consensus that tourism should be sustainable. In fact, all forms of tourism have the potential to be sustainable if planned, developed and managed properly. Tourist development organizations are promoting sustainable tourism practices in order to mitigate negative effects caused by the growing impact of tourism, for example its environmental impacts.

Mental convalescence tourism (travel experiences designed to support psychological recovery, stress relief, and emotional healing) and sustainable tourism (minimising ecological impact and ensuring environmental, cultural, and economic responsibility while benefiting local communities) are two emerging sectors which offer complementary values that can be unified into a distinctive and competitive tourist offer.

The tourism sector is undergoing a transformation toward more conscious, responsible, and wellness-oriented experiences. It is evolving beyond leisure, sightseeing, and entertainment toward meaningful, restorative practices increasingly embracing mental integrity, sustainability, and social responsibility. The tourism sector is expected to fulfil multiple comprehensive functions: providing leisure, supporting well-being, and minimising environmental and social impacts. Mental convalescence tourism (travel experiences designed to support psychological recovery, stress relief, and emotional healing) and sustainable tourism (minimising ecological impact and ensuring environmental, cultural, and economic responsibility while benefiting local communities) are two emerging sectors which offer complementary values that can be unified into a distinctive and competitive tourist offer.

Indeed, mental convalescence tourism addresses the growing need for psychological well-being, stress reduction, and post-COVID recovery. On one hand, mental convalescence—supporting recovery from stress, burnout, or emotional strain—has emerged as a pressing societal need. On the other hand, sustainable tourism is now a guiding principle for destinations and providers aiming to minimise ecological footprints and maximise benefits for local communities. Combining these two dimensions—concepts, destinations, and operators—into a single tourist offer can create experiences that address both the inner healing of travellers and the outer healing of ecosystems and societies, nourishing both the traveller's inner world and the external environment they engage with.

Such an integrated approach positions tourism as a tool for personal renewal, cultural respect, and environmental stewardship, aligning with global trends toward wellness and sustainability. Combining mental convalescence and sustainable tourism also offers a transformative model that responds to modern travellers' search for meaning, balance, and responsibility. By aligning mental recovery with eco-conscious practices, destinations can

cultivate experiences that not only heal the individual but also benefit the planet. This dual focus not only enhances competitiveness but also supports a more resilient, ethical, and regenerative tourism industry. In that way, destinations can create transformative experiences that restore the individual while respecting and enriching the environment and local communities.

By uniting mental convalescence with sustainable tourism, destinations can create a unique proposition: restorative travel that nurtures the individual while protecting the planet and empowering local communities.

This integrated offer also represents a forward-looking model for tourism in the 21st century—where well-being and sustainability are not separate luxuries but mutually reinforcing necessities. By uniting mental convalescence with sustainable tourism, destinations can create a unique proposition: restorative travel that nurtures the individual while protecting the planet and empowering local communities. It appeals to growing segments of health-conscious, environmentally aware travellers seeking meaning, balance, and authenticity in their journeys.

It features exposure to serene landscapes like forests, mountains, lakes, and coasts. Mental and sustainable tourism offers thus offer relaxation, convalescence, and health improvement opportunities. Eco-lodges, healing places, local cultural experiences, and health-centred indigenous rituals often mark these offers. The idea is to integrate tourism with self-care in environments encouraging rejuvenation through nature's therapeutic qualities. Mental and sustainable tourism offers are becoming ever more popular all around the world, combining elements of eco-tourism, adventure tourism, and cultural immersion (Figure 1).

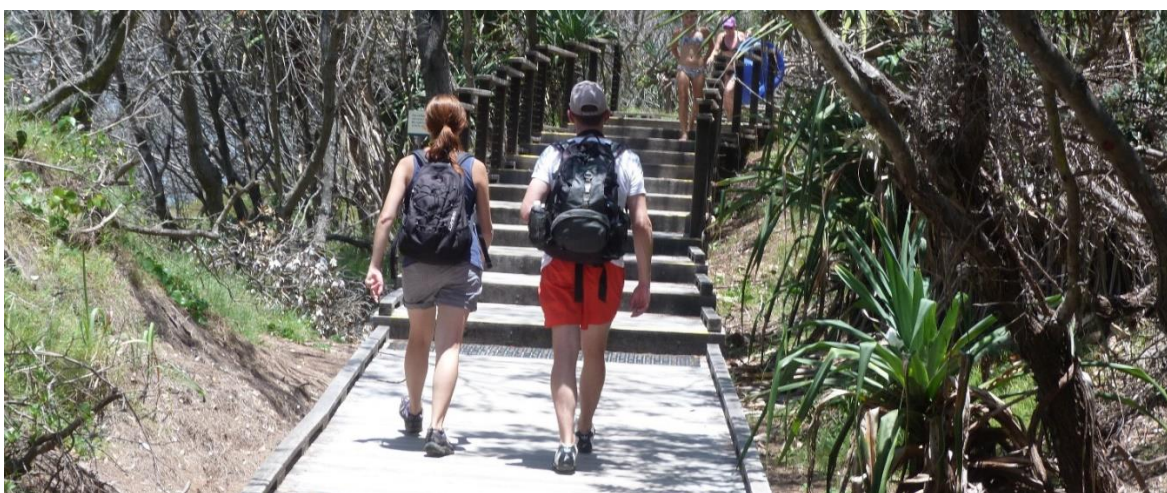


Figure 1. Mental and sustainable tourism offer. K'Gari Island, Australia (Credit: Ramūnas Povilanskas)

STUDY'S AIM AND OBJECTIVES

The main aim of this study is to accomplish a comprehensive description of models of mental and sustainable tourism offers that would contribute to developing the South Baltic mental and sustainable tourism certification system. The specific objectives of the study are as follows:

- ❖ To compile the inventory of the worldwide mental and sustainable tourism thematic offer models that could help in the development of South Baltic mental and sustainable tourism thematic offers;
- ❖ To highlight the essential features of models of mental and sustainable tourism offers, including the focus, geographical structure, benefits, and challenges, priority target groups and the variety of each offer model type;
- ❖ To illustrate each offer model type by at least one case study supplemented with a map;
- ❖ To prioritize the analysis of mental and sustainable tourism offers from the South Baltic countries: Denmark, Germany, Lithuania, Poland, and Sweden.

2. APITHERAPY TOURISM OFFER AND PRODUCTS

INTRODUCTION

Apitherapy tourism (also called apitourism, or bee-based wellbeing and bee-therapy tourism) packages therapeutic and experiential services and wellness experiences built around beekeeping and the therapeutic use of honeybee products and the hive environment (honey, pollen, propolis, royal jelly, beeswax, hive-air, and in some cases controlled bee-venom therapies). It is a niche, but fast-growing strand of wellbeing and nature tourism inside the broader wellness tourism market. Apitherapy tourism combines health and wellness services based on bee products with an experiential nature, and rural tourism, featuring clear synergies for the South Baltic coastal region — a landscape with a strong rural-coastal tourism interface, natural assets, and long-standing beekeeping traditions.

The South Baltic coastal region is well-placed to develop apitherapy tourism due to its coastal nature, strong rural beekeeping traditions, and policy focus on sustainable tourism. Apitherapy tourism sits at the intersection of health and wellness tourism, rural diversification, sustainable beekeeping, and experiential coastal tourism. It can be a high-value, low-footprint niche for the South Baltic coastal region if developed responsibly, since it blends wellness demand, coastal nature assets, and local beekeeping traditions. Therefore, apitherapy tourism can diversify coastal and rural economies in the South Baltic Region, lengthen seasons, and deliver conservation and education benefits — provided safety, quality and regulatory gaps are addressed.

The demand for sustainable apitourism products is growing among wellness travellers, but the sector faces two significant constraints: limited high-quality clinical evidence for many therapeutic claims and genuine safety and bee health risks that require strict protocols. Hence, the sustainable development of apitherapy tourism must strike a balance between product quality, health and safety, evidence-based claims, beekeeper capacity, and biodiversity and sustainability objectives. Its successful growth in the South Baltic will therefore hinge on combining clear safety and quality standards, targeted training of service providers and cross-border cooperation. The priorities are: safety and medical safeguards, bee welfare and sustainable practices, training and certification, and cross-border coordination to create trust and scale.

SCOPE

In a clinical sense, apitherapy encompasses the use of bee products, hive-associated practices, and bee-derived treatments for health purposes, including topical applications of honey and propolis, oral consumption of hive products, inhalation of hive air, and bee-venom therapies. Clinical evidence varies by product and indication. Bee products have biologically active properties (anti-inflammatory, antimicrobial, antioxidant), and bee venom contains compounds under active research for inflammatory and neurological conditions. However, apitherapy must be presented as complementary and offered with medical safeguards, such as the care for allergic reactions (including anaphylaxis) to stings or products. Liability, informed consent, pre-screening (including allergy testing and medical histories), and emergency procedures are mandatory for any apitherapy product.

In the tourism industry, apitherapy is converted into a tourist offer that could be split into passive and active apitherapy tourism services and products — attracting wellness travellers, eco-tourists, and those seeking complementary and alternative medicine (CAM) therapies. Passive apitherapy tourism packages combine lodging and garden immersion. They include tourist offers centred on the hive environment marketed for respiratory convalescence (hive-air inhalation) and audio-relaxation (sleeping while listening to hive-humming). Visitors stay overnight in specially arranged "bee-houses", "bee lodges", or "hive-rooms" close to hives with "bee beds" for restful sound/air exposure where they can inhale air from hives (beehive-air therapy), or enjoy restful stays near apiaries.

Active apitherapy offers combine wellness procedures, local bee product-based food or handicraft sales, and educational cum experiential activities. Apitherapeutic wellness spa treatments include honey massages, propolis facials and wraps, pollen baths, honey baths, and bee-product cosmetic therapies. Meanwhile, apitherapeutic complementary and alternative medical services include supervised applications of bee products (topical honey for wounds, propolis, royal jelly, pollen, and, in some cases, controlled bee-venom procedures) offered by trained practi-

tioners. Specialised therapy rooms in apiaries enable offering structured treatments and well-being experiences. Honey harvesting, tasting, and other gastronomic experiences, as well as product retailing (including local honey and propolis products), are closely linked to apitherapeutic wellness spa treatments.

Apiculture experiential tourism focuses on conservation and education programmes that emphasise the critical role bees play in our ecosystem and the significance of beekeeping practices. These programmes include educational and experiential visits to apiaries, where visitors can observe live beehives and learn about bees, their behaviours, and ecological roles. During hive and beekeeper visits, participants are guided by local beekeepers who share their knowledge and skills, allowing tourists to gain hands-on experience in beekeeping practices. This may include learning how to suit up in beekeeping gear, safely inspecting hives, and understanding the life cycle of bees, from egg to adult.

Beekeeper workshops are designed to provide an in-depth understanding of beekeeping techniques, covering topics such as hive management, seasonal care, and pest and disease control. Visitors might also engage in practical sessions where they learn how to extract honey, wax, and other bee products, thereby connecting tourism with local gastronomy through tastings and culinary experiences featuring honey. In addition to these hands-on activities, apiculture tourism emphasises the interpretation of beekeeping heritage. Visitors may explore the historical and cultural significance of beekeeping in the region, including the traditional methods used by local beekeepers.

Educational visits often include interactive exhibits and presentations that highlight the ecological roles bees play, such as pollination, which is essential for agricultural productivity and biodiversity. Beekeeping museums offer a chance to explore the history of apiculture, featuring traditional tools, ancient manuscripts, and the evolution of beekeeping practices over time. Various educational or experiential apiculture routes and trails may be developed to guide tourists through scenic landscapes while highlighting local flora that supports bee populations, thus fostering a connection between nature and conservation efforts.

These immersive tourism experiences play a crucial role in raising awareness about the threats facing bee populations, including habitat loss, pesticide use, and climate change. As a result, they not only promote sustainable tourism but also enhance public understanding of the importance of conservation efforts in protecting bees and their habitats, ensuring that future generations can continue to enjoy the benefits that these pollinators provide. By blending education, conservation, and local gastronomy, apiculture experiential tourism creates a fresh approach that engages visitors while supporting the livelihood of local beekeepers and contributing to the preservation of ecosystems.

ESSENTIAL NEEDS TO DEVELOP APITHERAPY TOURISM OFFERS

The primary need is to clearly distinguish leisure and experiential services from therapeutic interventions, as the latter require medical oversight, liability frameworks, and clear, informed-consent procedures. Then the following needs are essential for developing apitherapy tourism as a sustainable and competitive sector of the tourism industry:

1. Regulatory and safety framework for therapeutic interventions

- Clear local and national legal and regulatory status for apitherapy services in each country (scope of practice, i.e., medical vs complementary care classification, liability, hygiene, allergy management), and alignment across borders where possible to support multi-country itineraries;
- Protocols for medical screening, informed consent forms, clear contraindications for bee-venom exposure, emergency anaphylaxis procedures (adrenaline/autoinjectors, links to medical services), liability and insurance for providers (patient safety is non-negotiable);
- Trained staff with adequate qualifications, emergency procedures, and referral pathways to physicians;
- Clear information for visitors about what is evidence-based versus traditional and experiential uses;
- Standardised intake, allergy screening, emergency response plans (epi-pens or rapid access to EMS).

2. Quality standards for apitherapists, beekeepers, and wellness practitioners who use bee products

- Consistent hygiene and product-processing standards (honey, propolis, pollen), and labelling rules for therapeutic claims;

- Recognised credentials for practitioners, like a recognisable regional “apitherapy” certificate or code of practice, which could build visitors’ trust;
- Specialised training and certification for apitherapists and apitourism operators (procedural manuals, professional hygiene, product traceability);
- Cross-disciplinary training for apitherapists, guides, and beekeepers in beekeeping, hygiene, safe apitherapy delivery, visitor handling, apitourism marketing, eco-interpretation, hospitality standards, and basic medical emergency response;
- Partnerships with national apitherapy societies and veterinary services for product quality.

3. Research, monitoring and evaluation

- Local clinical trials, monitoring of outcomes, and clear consumer information to build credibility (or restrict claims where lacking evidence);
- Local pilots with health outcome tracking (subjective well-being, safety incidents), visitor satisfaction metrics and ecological monitoring (bee colony health);
- Local research partnerships to assess outcomes (efficacy, safety), especially for hive-air and bee-venom applications, to build medically sound offers;
- Allergy testing for products, especially bee venom, and hive exposure, to specify risks of allergy or anaphylaxis.

4. Infrastructure and integration with seaside tourism

- Accessible apiary sites, interpretation facilities, hygiene-compliant tasting areas, secure bee-houses for hive-air experiences, and seasonal scheduling;
- Upgraded visitor facilities at apiaries (safe viewing, controlled “hive-house” structures for hive-air sessions), accommodation standards for wellness stays, transport, and connectivity, digital booking and marketing channels;
- Adaptation of accommodations (hive placement), spa equipment, sterile product handling rooms, transport and logistics for bee products. Integration with beach, nature-trail, and cultural offers to lengthen visitor stays;
- Adapted apitherapy treatment rooms, accessible visitor pathways, signage, and accommodations that can integrate apitherapy packages.

5. Bee health and apiary biosecurity

- Bee health monitoring (including Varroa mite control and disease surveillance to maintain healthy and sustainable colonies), good beekeeping practices, and habitat management (forage strips and pesticide mitigation) are essential to secure product supply and animal welfare;
- Limiting visitor density to prevent stress to bee colonies.

6. Marketing and product differentiation

- Unique, genuine positioning (wellbeing + experience + local food) and seasonally adapted packages;
- Packaged apitherapeutic treatments (day visits, wellness retreats, combined coastal nature and apitherapy experiences), multilingual materials and shared, specialised cross-border platforms for apitherapy procedures booking;
- Translating apitherapy into cohesive tourism products (multi-thematic routes, multi-day packages, spa add-ons) that meet senior (“silver”) tourist expectations;
- SME support for product development (cosmetics, foodstuffs), packaging, and export readiness;
- Dedicated route and package planning and offer differentiation to ensure variety along the way;
- Joint branding (South Baltic apitourism route), and cooperation with existing wellness and nature tourism networks (e.g., SB Well, SB Manors, and N-B Well).

MAIN BENEFITS OF APITHERAPY TOURISM OFFERS

1. Economic and social benefits

- Diversifies coastal rural economies (new income streams providing supplemental revenue for small bee-keepers, guesthouses and spas via visitor fees, paid guided tours, accommodation, sales of retail honey and propolis cosmetics, other products and souvenirs, workshops;
- Strengthens destination branding through a unique, place-based product;
- Extends the tourism season by attracting shoulder-season visitors (spring/autumn);
- Supports off-season earnings and farm diversification through off-season wellness offers;
- Creates high-value niche products (experiential stays, certified apitherapy treatments);
- Supports rural micro-entrepreneurship and local supply chains.

2. Health and wellbeing (consumer perceived)

- Bee products have been documented to possess anti-inflammatory, antioxidant, antimicrobial, and immunomodulatory properties in both preclinical and clinical literature. Participants in hive-air and spa treatments commonly report subjective improvements in relaxation, sleep and perceived respiratory or dermatological benefits. They report stress reduction from immersive nature and ‘beescape’ experiences, as well as honey-based cosmetic treatments.
- Some clinical literature supports the benefits of selected bee products for specific indications (e.g., the anti-inflammatory effects of bee venom in controlled settings), but the evidence quality varies, and safety is non-trivial. In contrast, high-quality clinical evidence for some medical claims (e.g., bee-venom therapy for chronic disease) remains limited. Treatments are usually used as complementary and alternative therapies. Therefore, apitherapy service providers must avoid overstating clinical benefits. Presenting balanced information to visitors is essential.

3. Environmental and educational

- Apiary visits promote pollinator awareness, support apiculture, and can fund local biodiversity protection initiatives, such as habitat improvements and pollinator corridors in coastal landscapes when designed responsibly;
- Apitherapy raises public awareness of pollinator importance, can mobilise local conservation action, and support habitat-friendly land uses in coastal meadows and dunes;
- Apiary interpretation preserves and showcases traditional beekeeping skills and intangible heritage (beekeeping stories, crafts, festivals).

4. Place branding and competitiveness

- Unique apitherapy wellness experiences (hive-house sleeping, hive-air inhalation, honey spas and honey routes) attract niche travellers and lengthen stays;
- Apitherapy and bee products differentiate coastal destinations from generic beach offers, attracting wellness-oriented visitors.

MAIN DEFICIENCIES AND RISKS OF APITHERAPY TOURISM OFFERS

1. Regulatory gaps

- Many countries lack specific apitherapy regulations — practitioner competence and safety practices are inconsistent. Across EU member states and regions, apitherapy often occupies a grey area between wellness and medicine, creating market uncertainty and uneven supervision;
- Additionally, across the South Baltic countries, rules governing health services, animal welfare, food product standards, and accommodations differ, which complicates cross-border packages and standards;
- Few operators systematically track health outcomes, visitor satisfaction, or ecological impact.

2. Risk of misleading health claims

- While many bee products possess beneficial bioactive properties, rigorous clinical evidence supporting many apitherapy claims is limited, as many curative assertions lack robust clinical validation;
- Despite that, some apitourism operators market therapeutic benefits even without adequate clinical backing or oversight. Inconsistent clinical evidence for apitherapeutic claims risks misleading marketing, consumer harm, legal exposure, regulatory backlash, and reputational damage.

3. Safety and liability

- Inadequate allergy screening and emergency preparedness pose real dangers to visitors. Without proper medical screening and emergency readiness, treatments involving venom or bee stings can be hazardous. Indeed, exposure to bee venom and hive air can trigger severe allergic reactions, whereas the absence of screening and emergency protocols is a significant liability;
- Even more so, exposure to bee venom carries a real risk of an extreme allergic reaction and even death if left unmanaged. Therefore, apitherapy facilities must have emergency protocols and medical oversight.

4. Seasonality and capacity constraints

- Coastal tourism is seasonal, and apitherapy demand and bee activity are also strongly weather- and season-dependent, constraining year-round operations. Therefore, coastal tourism peaks may not align with or overlap optimal beekeeping seasons, and without season-extending strategies (e.g., controlled indoor hive experiences), revenue and service continuity may suffer;
- Scaling apitherapy treatments requires trained personnel and infrastructure investment. Many small beekeepers lack packaging, digital sales, or tourism partnerships. Hence, the shortage of certified apitherapists and trained staff who combine medical, beekeeping, and hospitality skills is the primary deficiency.

5. Fragmented offer and weak value chains

- Apitherapy products often remain undervalued due to weak links between beekeepers, health professionals, tourism operators, and local authorities, which limit product quality and scale. Many beekeepers are micro-producers lacking hospitality skills, product development capacity, and quality control;
- Furthermore, public awareness of apitherapy is niche, consumers may be sceptical without credible evidence and professional endorsement;
- Poor hygiene in tasting areas, poorly maintained hive houses, or untrained guides can reduce safety and repeatability.

6. Bee welfare and biosecurity

- Pests and diseases (Varroa mite and associated viruses) threaten apiary productivity and continuity of service. Failure to manage these can lead to a collapse in local supply;
- Too many visitors, poor apiary siting, or commercial pressure can harm bee health (diseases, stress, pesticide exposure).

BEST PRACTICES OF APITHERAPY TOURISM OFFERS

Below are evidence-based best practices organised by theme. Each recommendation includes practical actions tailored to the South Baltic coastal context and organised for easy implementation.

1. Designing tiered offers

- Design supervised topical and internal bee-product wellness packages (relaxation in a bee-lodge, honey facial, propolis wraps, pollen nutrition, honey massage, apidermal cosmetic treatments) with screening;
- Focus on low-risk educational apiary experiences, honey tasting, crafts;

- Ensure that apitherapy treatments are delivered only by licensed service providers and only in certified centres like clinically-safe apitherapy retreats (specially arranged hive-air rooms and facilities for supervised bee-venom therapy and other honey-based therapies);
- Use the evidence and risk profile to determine which apitherapy offer or product belongs to which tier and clearly label it accordingly.

2. Packaging apitherapy offers with coastal assets and season extension

- Connect apiary visits with coastal landscape walks, foraging, local gastronomy, and heritage to broaden market appeal (see Case Study 1);
- Combine apiary visits with coastal convalescence (sea air baths, cold-water dips, suntanning) for strong differentiation;
- Design a comprehensive wellbeing package (hive-air session, honey massage, local honey meals) combined with a stay at an apitherapy retreat (multi-day seaside convalescence, apitherapy, nature experience, culinary trails, salt-cave inhalation, birdwatching and cultural experiences to increase the length of stay, target a more diverse wellbeing tourist market and spread revenue;
- Offer a year-round portfolio to reduce seasonality: winter education (beekeeping history, honey processing, honey product cosmetics labs, honey gastronomy workshops, and digital or remote follow-up, e.g., web consultations), in addition to peak-season immersive stays.

3. Interpretation and storytelling

- Use coastal-specific narratives (e.g., dune flora honey, coastal forage seasons) to differentiate products;
- Apply interpretive storytelling to connect beekeeping heritage, coastal ecology and health science (transparency about what is evidence-based vs. traditional);
- Organise visits with interpretation and storytelling in small-group formats to reduce stress on hives and improve visitor safety and quality of experience.

4. Safety, regulation, and clinical integrity of apitherapy offers

- All therapeutic claims must be supported by appropriate medical evidence and provided under the supervision of licensed medical professionals. Standardised consent and allergy screening forms should be utilised;
- Ensure availability of epinephrine and have trained staff ready to respond to anaphylaxis for any exposure to bee venom or concentrated bee products;
- Implement clear labelling for products regarding hygiene, raw vs. pasteurised status, and floral origin;
- Publicly share counter-indications, mandate pre-treatment medical screening, and ensure informed consent is obtained;
- Develop a regional code for apitherapy tourism that includes treatment definitions, informed consent templates, allergy screening protocols, and emergency procedures;
- Practitioners offering invasive treatments, such as bee venom, require registration or certification; in contrast, non-invasive services must adhere to standard safety protocols;
- For all medical and therapeutic offerings, enforce documented informed consent, allergy history, and a signed medical disclaimer. Higher-risk procedures must involve referral pathways.

5. Training, certification, and quality control

- Focus on pivotal areas such as beekeeping, hospitality, apitherapy fundamentals, hygiene, and product processing, as well as first aid/anaphylaxis response, utilising ECTS-aligned micro-credentials for vocational school adoption;
- Establish product quality standards for honey, propolis, and pollen, including traceability, processing, and contaminant testing to support therapeutic claims and cross-border sales;

- Co-brand the certification programmes with tourism boards and apicultural societies, covering visitor safety, hygiene, interpretation skills, basic first aid, and environmental stewardship;
- Train beekeepers in visitor management and tourism operators in bee biology and allergy risks;
- Develop a simple bronze/silver/gold tier system for safety and sustainability that can be displayed to customers;
- Establish certification for apitherapist competencies, apiary welfare and biosecurity, and accommodation and spa hygiene, ensuring clear labelling and traceability for bee products;
- Utilise apitherapy societies and professional courses to efficiently adapt curricula for tourism contexts.

6. Bee health and sustainability

- Respect mandatory mite monitoring and integrated pest management (IPM) by create incentives for Varroa control, queen replacement and breeding programmes for resilient local stock;
- Monitor and record colony health metrics as a condition of certification;
- Coordinate with coastal municipalities and farmers to reduce pesticide exposure near apiaries and promote pollinator-friendly planting in tourist sites;
- Adopt bee-friendly land management practices (such as flower strips, reduced pesticide use, and habitat connectivity) and promote these actions in marketing as a conservation pledge;
- Develop apiary siting protocols to protect coastal habitats and avoid conflicts with nesting birds and protected dunes;
- Promote bee health monitoring and best husbandry (Varroa control, forage diversity) to ensure long-term viability of apiaries supporting tourism;
- Adopt integrated pest management for Varroa and disease, maintain floral corridors, limit pesticide exposure near apiaries, and set visitor caps/seasonal rest periods for colonies;
- Promote certified sustainable apiary labels (regionally recognised) that demonstrate bee welfare and habitat stewardship.

7. Risk management (minimum required measures)

- Promote mandatory pre-treatment screening (history of allergy), emergency protocols and anaphylaxis training and equipment on site;
- Offer insurance solutions for providers (public liability, professional indemnity);
- Provide clear consumer information and a no-overclaim policy for therapeutic outcomes; marketing must be evidence-based;
- Establish partnerships with universities and apicultural research centres to evaluate sensory and well-being outcomes of hive-air and topical treatments, and to establish evidence thresholds for therapeutic advertising;
- Collaborate with national health authorities to determine whether apitherapy treatments are considered wellness services or health interventions that require medical licensure. Ensure professional liability insurance adapted to apitherapy tourism activities.

8. Marketing of coastal apitherapy offers and products

- Target wellness travellers (EU intra-regional), ‘silver’ tourists (retirees), and families seeking educational and natural experiences; use evidence and testimonials to build trust in these demanding markets;
- Avoid making unverified health claims in marketing; instead, promote wellbeing, local heritage, and experiential value;
- Emphasise provenance, small-scale production, and coastal floral signatures;
- Apply AI-based e-commerce marketing by utilising user-tailored product pages, allergy disclaimers, and easy booking for tours and retail products, such as honey scrubs and propolis;

- Keep most apitourism offers in the experiential wellbeing category and require licensed medical supervision for therapeutic interventions; it protects visitors and the sector's credibility;
- Create multilingual booking and certification info that travellers can trust.

9. Monitoring and success indicators

- Number of certified apitherapy operators and trained staff;
- % of products with verified origin and labelling;
- % of purely organic, certified products;
- Incidence of adverse medical events (target: zero);
- Safety metrics: allergic reactions per 1,000 treatments (target: zero severe events);
- Other serious incidents per 10,000 visits (target zero serious incidents);
- Customer satisfaction and measurable well-being outcomes (validated questionnaires pre and post visitation);
- Visitor numbers and bednights in apitourism packages (seasonality shift);
- Visitor repeat rate (target >40% repeaters);
- Additional revenue from tourism and product sales per participating beekeeper (€/year);
- Apiary health metrics: (winter loss rates, Varroa load reductions, forage diversity index);
- Acreage of pollinator-friendly habitat created or enhanced (in hectares);
- Research outputs: number of peer-reviewed studies or transparent outcome reports.

CASE STUDY 1. APITHERAPY TOURISM OFFER INTEGRATED INTO A SUSTAINABLE COASTAL TOURISM SYSTEM (LOLLAND ISLAND, DENMARK)

INTRODUCTION

The Twin Islands of Denmark, Lolland and Falster, offer beautiful landscapes and are ideal for a family vacation. Danes love their beaches, enjoy them, and invite guests to experience Danish seaside beaches as wellness destinations. Especially in southern Lolland, nine beaches of the Baltic Sea are regularly awarded the Blue Flag. However, for those who wish to avoid the peak season hustle on the seaside, shoulder seasons (September-October and April-June) are the best time to enjoy this wellbeing route. Especially those who seek inner peace of mind, recovery, care for their body, and want to contribute to the wellbeing of bees, nature, and the environment should explore this exceptional gateway to Denmark from the continent.

PURPOSE OF THE OFFER

Located in the scenic South Baltic part of Denmark, the Twin Island mental and sustainable tourism offer integrates four wellness amenities, including an apitherapy offer. Coastal cycling routes intersect the apiaries and manors offering local honey and cherry wine tastings. Seasonal festivals celebrating local crafts, and wellness traditions enhance the visitor experience. Well-signposted cycling paths connect beaches and manors allowing travellers to enjoy the scenic beauty. The VisitLollandFalster Association uses the coastal wellness offer to enhance the region's reputation as a top-notch wellness tourism destination pursuing these purposes:

- **Reinforce the regional wellness business and tourism brand:** Promote Lolland and Falster as a region of pristine beaches, rural traditions, natural beauty, and support local businesses through a cohesive tourism brand emphasizing coastal wellness and healthy regional products;
- **Promote Lolland and Falster as an innovative wellness tourism destination:** Position the Twin Islands as a leading premier wellness destination for physical rejuvenation and mental relief by combining natural resources with innovative nature-based mental convalescence concepts;
- **Blend exclusive wellness experiences:** Addressing aficionados of wellbeing, pampering, and nature with a diverse range of interconnected offers from rural tourism to luxurious relaxation experiences to outdoor activities (manors, honey, food, and cycling).

THE OFFER HIGHLIGHTS THESE APITHERAPY-RELATED ASPECTS:

- **The role of nature in apitherapy:** Combining the healing benefits of natural honey and the relaxing impact of hiking, cycling, and enjoying the scenic coasts, beaches, and orchards of the rolling Twin Island countryside shows how nature and wellness complement each other;
- **Gastronomic and wellness synergy:** Highlighting Twin Islands wellness traditions through honey culture, local products like the award-winning beer, cider and cherry wine, and fresh farm-to-table cuisine results in the promotion of balanced diets and lifestyle practices, healthy nutrition, locally sourced, organic cuisine;
- **Seasonal appeal:** Opportunities to enjoy the landscapes and wellness offerings during the apple harvest season in autumn, springtime blooms, relaxing winter wellness retreats, or the summer outdoor season reinforce the competitiveness of the apitherapy tourism offer.

MAIN STOPOVER SITES AND THEIR WELLNESS OFFERS (FIGURE 2)

1st Stop. Marielyst Beach

Marielyst Beach is part of the approximately 10km of sandy beaches found on the south-east coast of Falster. It is a great place to spend a sunny weekend all year round, especially during the shoulder seasons when there are fewer holidaymakers. The beach at Marielyst is a lovely and wide child-friendly sandy Blue Flag beach with shallow and calm water. Children can build sandcastles and collect sea-shells in this scenic environment. There is wheelchair access to the beach.

- **Approximate length:** 10km;
- **Approximate time required:** 2.5 to 3 hours with the possibility for an overnight stay;
- **Mental convalescence destination:** Marielyst;
- **Recommended starting point:** Central beach entrance.
- **GPS:** 54°41'24.5"N, 11°58'09.8"E.



2nd Stop. Frejlev Honning

Frejlev Honning is a farm on the island of Lolland close to the Baltic Sea. Here, beekeeper Lene Frandsen produces honey in loving cooperation with the bees, as she formulates it herself. She aims to make a unique, high-quality honey while supporting nature and biodiversity. She places beehives in fields of flowers, woods, and swamps in the countryside on the island. The farm owners sow up to 12 hectares of insect-friendly flowers each year. The honey is purely natural and authentic. Nothing is added, and it is not heated during production, thus preserving its antibacterial and medicinal properties (Figure 3).



- **Approximate time required:** 2.5 to 3 hours
- **Wellbeing destination:** Den originale Frejlev Honning, Kettinge, Denmark
- **Recommended starting point:** Enghavevej 40, Kettinge. **GPS:** 54°41'41.2"N, 11°48'32.9"E
- **Wellbeing host:** Lene Frandsen, owner

3rd Stop. Nysted Strand Camping

Nysted Strand Camping is situated on the southeast coast of Lolland, directly on the Baltic Sea, and is open all year round. It is a family-owned enterprise driven by a passion for people, nature, and environmental care. The owners are continually testing and implementing new ideas to promote sustainability and contribute to the sustainability movement in the camping industry. It was the first camping site in Denmark to receive the EU Ecolabel. It is an official label of environmental excellence awarded to products and services that meet high ecological standards throughout their life cycle.

- **Approximate time required:** 1 to 2 hours with the possibility for an overnight stay;
- **Wellbeing destination:** Nysted, Lolland island;
- **Entry point:** Skansevej 38, 4880 Nysted;
- **GPS:** 54°39'14.9"N, 11°43'53.5"E;
- **Wellbeing hosts:** Henrik and Nicole Søby.



4th Stop. The Baltic Coast (Paradise) Route

Hiking and cycling along the south coast of Lolland are excellent ways to explore the varied coastal landscape and visit secluded public areas. Visitors can enjoy a remarkable landscape of forests and fields, featuring characteristic stone walls and numerous manor houses and castles located in the most picturesque settings. The Paradise Route (part of the international Baltic Sea coastal cycling route N8 / EuroVelo 10) is a cycling route that runs along Lolland's south coast from Nykøbing F. to Nakskov and offers opportunities to experience history, culture, and nature. The cycling route offers to visit six historic castles and manors. The Paradise Route also leads along nine beaches of the south coast of Lolland, which are regularly awarded the Blue Flag. Peter Hansen's Garden in Vesternæs is also a unique seaside wellbeing tourism hotspot. It is horticulture with one of Northern Europe's largest privately owned plant collections, a natural nectar source, spanning 30,000 m². It is challenging to take the same route back by bike, so consider staying overnight or taking your bike on the local train at Nakskov.



- **Cycling path length:** 22km from Nykøbing F. to Nysted, 30km from Nysted to Brunddragene, 43km from Brunddragene to Langø;
- **Approximate time required:** 12 to 15 hours (by bike);
- **Wellbeing destination:** south coast of Lolland
- **Recommended starting point:** Nysted Strand Camping;
- **GPS:** 54°39'14.9"N, 11°43'53.5"E.

Source: SB Well, a cross-border cooperation project of the Interreg South Baltic 2014-2020 Programme



Figure 2. Apitherapy tourism offer integrated into a sustainable coastal tourism system (Lolland Island, Denmark)
(Credit: Ramūnas Povilanskas)



Figure 3. Den originale Frejlev Honning apiary in Kettinge (Lolland Island, Denmark)
(Credit: Den originale Frejlev Honning)

3. BIRDWATCHING TOURISM OFFER AND PRODUCTS

INTRODUCTION

Birdwatching tourism (also called birding tourism or avitourism) is a rapidly growing, high-value, low-impact niche activity within nature- and experience-based tourism that uses bird observation, interpretation, and related nature experiences as the primary reason for a visitor's trip. Tourists travel to observe, photograph and learn about wild birds and their habitats. Hence, birdwatching tourism can deliver economic, social, and conservation benefits to coastal communities if planned and managed to avoid disturbance and habitat damage.

The South Baltic coastal region of five EU Member States — from the Scandinavian shores to the Curonian Spit and coastal wetlands of Lithuania and Poland, including internationally essential sites such as the Curonian Spit, Öland Island, and Pomeranian Bay — is a mosaic of lagoons, dunes, cliffs, alvars, skerries, reedbeds, coastal forests, and wetlands on the southern edge of the Baltic Sea. These coastal areas already contain internationally important bird migration corridors and sites (the Curonian Spit, Vistula Lagoon, Öland, and Rügen islands) and attract a growing interest among birdwatching visitors. Key regional assets include major migration bottlenecks and Ramsar sites.

There are already existing cross-border initiatives to network birding sites and promote sustainable nature tourism. Therefore, the South Baltic coastal region has strong potential and is well-placed to scale responsible birdwatching offers, including their use as a means for mental convalescence. Evidence from recent European projects indicates that developing birdwatching tourism sustainably can increase both community and ecological benefits when properly managed. Developing birdwatching tourism in this region can deliver off-season visitation, lengthen tourism seasons, diversify coastal economies, provide additional local income for rural communities, and offer strong incentives for habitat conservation.

To realise this potential at scale, the South Baltic coastal region needs coordinated habitat protection, visitor-care infrastructure (hides, viewing platforms, trails), cross-border coordination, clear visitor management practices, certified guiding capacity, strict and consistent codes of conduct to avoid disturbance and safeguard biodiversity, cross-border monitoring, marketing and funding mechanisms that target the right market segments and align tourism with conservation objectives.

SCOPE

Birdwatching tourism encompasses travel products and services for tourists that primarily aim to observe, photograph, or study wild birds in their natural habitats, as well as experience these bird-related habitats. They include guided field trips, observation hides, towers, or platforms, interpretive centres, bird-focused visitor accommodations, photo tours, citizen-science activities, themed events (such as migration festivals and ringing demonstrations), and travel logistics. Typical birdwatch tourism activities range from short guided walks and coastal boat trips for casual birdwatching (day trips, family excursions) to multi-day specialist tourism (multi-day tours, “listers”, photographic safaris). Demand can be seasonal (migration stopovers) or year-round (local breeding and wintering species).

More specifically, birdwatching tourism in South Baltic coastal landscapes and habitats typically includes a wide array of products and formats:

- ❖ Migration hotspot day-tours and half-day guided walks for bird observation during spring and autumn migration and wintering periods at shorelines, islands, capes, lagoons, and river mouths;
- ❖ Multi-day guided birding packages, timed to coincide with migration windows, combine coastal sites (e.g., Vistula Lagoon, Curonian Spit, coastal bays) with inland wetlands;
- ❖ Fixed infrastructure-led offers include observation towers, hides and blinds, boardwalks, and marked birding trails, enabling low-impact viewing. These are complemented by interpretation centres and panels, visitor centres, and small museums;
- ❖ Festival and event products: spring/autumn migration festivals, ringing (banding) demonstrations, and public counts;

- ❖ Citizen science and volunteer tourism experiences (excursions led by local guides, volunteer-friendly migrating bird counts, nest monitoring, ringing station visits and demonstrations, hosting bird-survey volunteers, habitat restoration camps and data-collection schemes);
- ❖ Accommodations with a birding focus: birding-friendly B&Bs, eco-lodges offering early breakfasts, quick access to sites, and storage for optics; agritourism stays with local guides, and bird photography workshops;
- ❖ Bird migration observations arranged for specialist visitors (dawn/dusk watchpoints, coastal headlands, and ringing stations);
- ❖ Guided extended tours (multi-site itineraries across the South Baltic coast and inland wetlands, wildlife photography safaris and specialist workshops).

ESSENTIAL NEEDS TO DEVELOP BIRDWATCHING TOURISM OFFERS

1. Bird habitat planning, management, and disturbance control

- Inventory and map core coastal birding sites (importance, peak season, ownership, access), then design cross-border itineraries and transfer logistics;
- Maintain and restore coastal reedbeds, mudflats, dunes and lagoons; manage water levels where feasible; reduce pollution and disturbance sources;
- Apply zoning to sensitive areas, such as bird nesting and roosting sites, with seasonal closures or buffer zones;
- Clear trails and establish signage to keep visitors on authorised routes.

2. Low-impact visitor access infrastructure and regulations

- Low-impact observation hides, blinds, platforms, towers, boardwalks, well-located trails and designated viewing points with minimal visual and acoustic disturbance;
- Car parks located away from sensitive sites and sheltered to avoid disturbance; adequate signage and interpretation; safe access for people with reduced mobility;
- Enforced disturbance-minimisation rules for visitors and tour operators;
- Mapped sensitive zones (viewing versus core breeding and roosting areas) with buffer distances, seasonal closures (fenced breeding zones closed in spring), established maximum group sizes, permitted distances, and codes of conduct to minimise disturbance, clear signage, and access rules to concentrate viewing.

3. Training and regulations in quality guiding and interpretation

- Training and certification schemes to accredit bird guides (training in species identification, soft interpretation skills, ethics, visitor communication, safety, first aid, language skills);
- Birdwatching tourism hospitality training for remote hosts, and community awareness to reduce disturbance by non-birding visitors;
- Clear guiding permit and licensing systems for commercial guides in sensitive areas;
- Birdwatching tourism service providers should employ only accredited local guides to ensure that economic benefits remain local.

4. Data, monitoring, and partnerships

- Regular and systematic bird monitoring (counts, ringing data), coordinated ringing schemes and visitor-pressure monitoring to adapt management and demonstrate conservation outcomes;
- Partnerships with ornithological societies and ringing stations to provide up-to-date phenology, rare-bird alerts, and current situation monitoring to inform product timing;
- Links to eBird and European bird atlases to track migration, site importance, show ecological trends and assess visitation limits.

5. Accommodation, logistics and local value chains adapted to birders

- Establishing local value chains comprising local accommodation, certified local guides, local transport providers, cafés, and craftsmen;
- Hospitality businesses in the sensitive areas must specifically serve birders' needs (early meals, luggage transfer options, small-group catering, transport solutions for small groups and photographic hides, off-season offers to reduce seasonality, secure parking, drying and storage rooms for optics, multilingual information).

6. Cross-border marketing, product promotion, and funding

- Targeted promotion through specialist channels, mapped birding routes, and seasonal itineraries;
- Clear target segments (twitchers, casual nature tourists, photographers) with multilingual materials and online booking;
- Marketing focused on specific birding niches (migration watchers, waterbird specialists, family nature tourists) and seasonal packages;
- Coordination of site standards, marketing, and product development across the South Baltic via Interreg-level working groups;
- Shared itineraries and harmonised messaging to create a coherent regional birding experience;
- Publicly funded pilots for infrastructure, training, shared certification, a recognisable regional birding brand, and joint marketing initiatives;
- Integrated multi-site routes with transport links and standardised visitor information;
- Funding mechanisms (visitor fees, donations, local business partnerships) for habitat management and restoration.

MAIN BENEFITS OF DEVELOPING BIRDWATCHING TOURISM OFFERS

1. Economic

- Birdwatching tourism often attracts longer-staying, higher-spending, low-impact visitors (specialist birders and photographers spending on guides, taxis, optics, specialist tours and local food), who travel off-peak (shoulder seasons), stay in small-scale accommodation, and deliver direct income to guides, accommodations, and local businesses;
- Thus, if properly organised, birdwatching tourism can increase local income and mitigate seasonality in rural and coastal communities that lack mass tourism infrastructure, thereby diversifying coastal economies and extending the season length;
- Market studies identify birding as one of the fastest-growing niche markets in outdoor tourism;
- Notably, market studies also highlight the growing demand in the Global North for bird-based mental convalescence tourism.

2. Conservation

- Well-managed birdwatching creates political and financial support for coastal conservation, funds monitoring (ringing and banding stations) and encourages habitat restoration;
- Birdwatching tourism also creates financial incentives to protect wetlands and coastal habitats (habitat protection funded by entrance fees, guided tours, and conservation tourism revenues);
- Networked sites encourage landscape-scale conservation planning;
- Well-managed bird tourism motivates habitat protection, creates constituencies for coastal conservation, and supports monitoring via citizen science;
- Visitor fees, guided tours and volunteer programmes can fund habitat management and monitoring; raising the local value of intact coastal wetlands.

3. Social and educational

- Enhances local awareness of biodiversity, provides educational resources for schools, and fosters opportunities for community engagement and volunteerism;
- Reinforces environmental education, citizen science (counts, eBird), local pride in natural assets and opportunities for youth engagement;
- Provides possibilities for community events (counts, festivals) and nature education;
- Creates local guiding and hospitality jobs (often micro-enterprises or family businesses).

4. Branding and destination positioning

- Brands the South Baltic coastal region as a multi-season birdwatching tourism destination, differentiating it from sun, sand, and sea offers and attracting niche international segments with a specific focus on mental convalescence;
- Positions the South Baltic as a high-quality destination for international and regional birding markets.

MAIN DEFICIENCIES AND RISKS OF BIRDWATCHING TOURISM OFFERS

1. Disturbance to birds

- Poorly planned trails and sited hides, as well as poorly managed viewing (including boats, photographers, and large groups), along with unregulated access, uncontrolled photography, drones, and the presence of dogs or large birdwatcher crowds, can damage nests, flush roosting birds, and displace them from feeding or breeding sites;
- All these disturbances can interrupt breeding and cause its failure or push birds away from crucial staging areas, undermining conservation goals and reducing site quality for birds.

2. Insufficient infrastructure, product quality, and trained workforce

- Many South Baltic coastal sites, otherwise attractive for birdwatching tourism, suffer from insufficient or poorly maintained birdwatching infrastructure, poor signage and lack of safe parking and arrival points;
- Lack of hides, designated trails and interpretation reduces visitor experience and concentrates disturbance at uncontrolled spots;
- Bad logistics, poor access for less mobile visitors, or unreliable site information reduce repeat visitation;
- Small South Baltic coastal hospitality businesses lack know-how and support for specialised services;
- Few trained and certified bird guides, and limited multilingual guide capacity for international markets.

3. Seasonal congestion and mismanagement

- Peak bird migration windows are narrow, requiring flexible products and well-timed marketing;
- Prominent bird migration peaks create heavy, short bursts of demand and can overwhelm local services, creating concentrated disturbance that increases pressure on wildlife while other months remain quiet;
- Popular watchpoints without adequate visitor management can suffer from trampling, litter, and conflict with other coastal users;
- Failure to differentiate products for hardcore birders vs. casual wildlife tourists leads to poor visitor satisfaction and lost repeat business;
- Advertising exact nest or roost locations can attract damaging visitation.

4. Regulatory and liability uncertainties

- Unclear rules on commercial guiding in protected areas and a lack of tailored insurance products;
- Fragmented management across national borders leads to inconsistent regulations and limited data sharing, complicating flyway-scale planning;

- Varying national rules on access and tourism services hinder cross-border itineraries and standards;
- Different signage languages and conservation priorities may confuse visitors and weaken protection;
- Inconsistent quality and regulations across countries complicate cross-border packages.

5. Lack of dedicated sustainable management

- Some Baltic Sea breeding and wintering species are declining (e.g., certain seaducks and waders) as conservation priorities are compromised by tourism growth;
- In many South Baltic coastal areas, trampling, inappropriate infrastructure and coastal development degrade key bird habitats;
- Local communities can miss out on benefits from birdwatching tourism unless they are directly involved through local hiring and supply chains.

BEST PRACTICES OF BIRDWATCHING TOURISM OFFERS

1. Professional guiding and credentials

- Develop regional certified guide training programmes recognizable across the South Baltic Region (training on species identification, codes of conduct, biosecurity, health, safety, first aid, customer service, foreign languages);
- Partner with national ornithological societies (e.g., BirdLife partners) to design curricula;
- Utilise train-the-trainer models and cross-border exchange to rapidly elevate standards;
- Encourage the use of local guides and create a readily searchable regional guide list to retain economic benefits within the local community.

2. Zoning and seasonal access management

- Use spatial planning to define core conservation areas (no access), buffer zones (controlled access) and visitor zones;
- Create protected zones (e.g., breeding reedbeds closed in spring);
- Apply seasonal closures for breeding and roosting and limit group sizes during sensitive windows;
- Use timed access or permit systems at most sensitive sites;
- Define observation points and time-of-day restrictions where needed;
- Design timed bookings for popular viewpoints; provide alternative sites and off-peak activities (forest birding, reedbed canoe trips, guided moth/bat nights) to spread visitor pressure;
- Clearly mark core conservation zones and separate viewing corridors to reduce disturbance.

3. Design infrastructure for low disturbance and high experience value

- Build or upgrade hides, towers, and observation platforms at key vantage points, ensuring careful sight-lines, natural vegetation buffers, and visitor flows that minimise disturbance to birds and permit year-round access;
- Build hard-surface and raised boardwalks and install telescopes at appropriate distances to allow for good views with low-impact design (boardwalks to protect vegetation; hides set back from nests), sited through an environmental impact assessment to avoid trampling and erosion;
- Carefully design car parks as well as approach routes and guided trails to reduce human intrusion into the core bird conservation habitats;
- Ensure safe parking and transport, trail maintenance, and accessible hides where possible and sustainable low-emission transfer options (shuttle buses, bicycle routes);
- Provide public toilets that are accessible to visitors with special needs and waste disposal facilities to minimise the impact on the environment.

4. Responsible product development and marketing

- Create tiered offers: 1) Specialist tours include multi-day, targeted species, small-group, and offline logistics; 2) Family and casual offers include short guided walks, bird hides, and youth programmes; 3) Photographic hides designed for paying photographers, featuring rules and booking systems to control usage;
- Target the right markets (specialist birders, small groups, and photographers) and avoid mass-market messaging that could attract high visitor numbers to sensitive zones;
- Differentiate products (twitcher-focused fast-sightings vs. relaxed family birding);
- Avoid making guaranteed-species claims; instead, advertise likely sighting windows and highlight key habitat features;
- Linking ringing stations and monitoring projects with tourism: supervised visits, volunteer weeks, and real-time species logs enhance both scientific research and visitor experiences. This strengthens conservation legitimacy;
- Never give precise nest or roost coordinates in public marketing; route specialist briefings through guides and trusted networks;
- Ensure local stakeholders (fishers, farmers, municipalities) receive a share of benefits and are engaged in zoning decisions to reduce conflict;
- Offer lower-cost or community-led experiences to distribute benefits.

5. Use digital tools smartly

- Institutionalise regular bird counts, visitor counters, and a simple incident reporting system (disturbance, trespass);
- Integrate monitoring data into planning and management decisions, as well as the establishment of visitor limits;
- Conduct visitor-impact studies and publish the results to inform adaptive management;
- Utilise apps for real-time sighting updates (mobile-friendly), online booking for guided tours and hides, and pre-trip briefings to establish expectations and minimise on-site disturbance.

6. Birdwatching tourism planning

- Map a regional birding route network with core and satellite sites;
- Time itineraries around migration peaks and local phenology to provide reliable sightings and allow capacity-sharing between areas;
- Many initiatives demonstrate how integrating multiple sites and partners can extend the seasonality and enhance visitor experiences;
- Require birdwatching tourism operators to invest a portion of revenue in habitat management and monitoring (e.g., reed cutting schedules, predator control where needed, invasive species management);
- Publish monitoring results to show conservation benefits.

7. Code of Conduct

- Adopt and promote an ethical birding code (keep distance, avoid playback, small groups, silence, no flash photography);
- Utilise clear panels on-site and digital pre-visit briefings. The American Birding Association code and European equivalents provide proven templates;
- Adopt and enforce a regional “birding code” based on international best practice (respect distances, no playback in breeding season, no approaching nests, no drones) and require all guides and operators to follow it;

- Publicly display a short code at every site and in visitor materials;
- Mandatory briefings, enforced minimum viewing distances, limits on group sizes, and seasonal closures for breeding/roosting areas — all backed by local regulations and signage;
- Use established guidance (BirdLife and national bird societies codes) to design visitor rules and interpretive messaging; place succinct “birds first” reminders at access points.

8. Cross-border networks and joint marketing

- Harmonise routes, monitoring, and standards across the South Baltic coastal region by creating a South Baltic Birding Route (site catalogue, seasonal calendars, itineraries, operator lists) with joint branding;
- Create joint itineraries, standardised signage (multilingual) and a common “South Baltic Birding” brand highlighting seasonal focal points (spring migration, autumn passage, wintering waterfowl);
- Utilise cross-border birdwatching sites, landscapes, and birdwatcher stories from different countries for international marketing purposes;
- Train hosts in different countries in safety and hospitality using the similar training programmes;
- Pilot a handful of clearly segmented birdwatching offers, and introduce a regional sustainability certification to build consumer trust;
- Adopt a conservation-led, cross-border approach emphasizing site sensitivity mapping, low-impact infrastructure, guide training, shoulder-season products, and coordinated branding (see Case Study 2);
- Minimise risk and build credibility among specialist birding markets by a phased pilot approach focused on a cross-border network of flagship birdwatching sites;
- Set standard quality criteria for a regional birding brand.

9. Monitoring and success indicators

- Number of certified bird guides and trained local businesses;
- Number of coastal sites with birdwatching hides and towers;
- Availability of multilingual information at the most visited sites;
- Compliance with the Code of Conduct, incidence of breaches;
- Number and bednights of birding visitors (by site and season);
- Average length of stay outside the peak beach season;
- Customer satisfaction and well-being outcomes (validated questionnaires pre and post visitation);
- Visitor numbers and bednights in birdwatching tourism packages (seasonality shift);
- Local birdwatching guide employment level (days/year);
- Visitor repeat rate (target >40% repeaters);
- Additional revenue from tourism and product sales per participating service provider (€/year);
- Level of community satisfaction;
- Long-term population trends in key species counts (staging, breeding, wintering);
- Important bird habitat condition metrics;
- Breeding success rates at sensitive sites;
- Measured disturbance events;
- Area of habitat in improved condition;
- Number of cross-border itineraries;
- Number of joint promotions and marketing campaigns;
- Research outputs: number of peer-reviewed studies or transparent outcome reports.

CASE STUDY 2. BIRDWATCHING TOURISM OFFER INTEGRATED INTO A SUSTAINABLE COASTAL TOURISM SYSTEM (LITHUANIA)

INTRODUCTION

The year-round bliss in the Seaside Regional Park and the Curonian Spit, sandwiched between the Baltic Sea and the Curonian Lagoon coast, presents unique opportunities for nature-based mental convalescence aficionados. Many places and services are available for those who want to combine the joy of birdwatching with memorable experiences and impressions. In all seasons, in the Seaside Regional Park and on the Curonian Spit, visitors can enjoy unique opportunities to refresh their souls and perceive the fragility of the connection between us and the environment. On a sunny yet windy autumn day, guests will enjoy the outdoors and be fascinated by the charming autumn landscapes and seascapes, the voices of migratory birds, forests and meadows covered in cobwebs, as well as seasonal delicacies offered by locals.

The Seaside Regional Park and the Curonian Spit offer a mental convalescence experience comprising a variety of activities designed to rejuvenate the body and mind, featuring a blend of birdwatching, hiking along the seaside beaches, a unique guided amber catching experience, and watching breathtaking sunrises and sunsets. By engaging with its distinctive landscapes, watching flocks of cranes and geese heading south, and indulging in mindful practices like amber catching, travellers can indulge in genuine mental relaxation and convalescence.

PURPOSE OF THE OFFER

The Seaside Regional Park and the Curonian Spit birdwatching and related tourism offer caters to travellers seeking relaxation, connection with nature, and immersion in the Lithuanian coastal heritage. It combines the best of coastal natural beauty, biodiversity, and cultural richness to create a transformative journey for mental wellness and peace of mind. The offer provides an opportunity to explore the biodiversity, tranquillity, and cultural richness of the most interesting part of the Lithuanian Baltic seacoast and its clustered UNESCO-listed landscape amenities:

- **Promoting Holistic Wellness:** The offer is designed to offer physical, mental, and emotional transformation through nature-based activities and amber-catching experiences;
- **Fostering Connection with Nature:** Provides travellers with opportunities to engage deeply with the coastal cultural and semi-natural landscapes, diverse birdlife, and seaside beauty;
- **Preserving Unique Cultural and Natural Heritage of the Lithuanian Baltic Sea coast:** Encourages sustainable tourism while showcasing the exceptional ecology of the Lithuanian Baltic Sea coast, and coastal landscapes;
- **Encouraging Slow Travel:** Combines active experiences like hiking and birdwatching with a slow, immersive experience in natural and cultural settings, including guided amber-catching excursions, allowing for moments of reflection and relaxation.

THE OFFER HIGHLIGHTS THESE WELLNESS-RELATED ASPECTS:

- **Nature Therapy:** How activities such as birdwatching, catching amber, and walking along sandy beaches can enhance physical and mental wellness and immersion in nature, delivering both personal health benefits and environmental stewardship;
- **Wellness Through Cultural Immersion:** The integration of traditional Curonian traditions, creating bliss moments of social connection and relaxation, with modern wellness trends, leads to a balanced and fulfilling travel experience;
- **Culinary Wellness:** Savouring healthy, wholesome, locally sourced food in traditional rural restaurants and cafes specialising in organic, wellness-focused menus that reflect the local culinary heritage;
- **Active Recreation:** Options for cycling, Nordic walking, light outdoor activities, and strolling to complement the wellness experience and promote physical health;
- **Seasonal Versatility:** Showcases how various seasons enhance the experience, as visitors can enjoy distinct experiences year-round, from migratory birdwatching in spring and autumn to long summer evening beach walks to winter sunsets over icy shores.

MAIN STOPOVER SITES AND THEIR WELLNESS OFFERS (FIGURE 4)

1st Stop. Guided amber-catching excursion in Karklė

The inhabitants of the South Baltic coastal areas have long cherished the gift of the sea – amber, equating it with gold. Many believed and still believe that amber has a magical power to protect against evil. Smelling amber is traditionally used to treat respiratory diseases and ear pain. During a storm, waves wash pieces of amber ashore on the South Baltic seacoast, but for an inexperienced visitor, the chances of spotting a piece of amber on the beach are slim. Igoris Osnač, an experienced professional guide in the Karklė village, organises excursions where he teaches participants how to catch amber and use it as a traditional healing agent.

Because amber has a similar density to water, there is a greater chance of catching amber during colder periods, when amber is more easily washed ashore. An amber-hunting excursion on the Karkle beach is especially valuable for wellness tourism. It is a unique outdoor leisure activity that encompasses all the essential elements of mental convalescence and physical integrity: physical, mental, and spiritual harmony, active recreation, and a connection with oneself, others, the community, and nature.

- **Approximate time required:** 2 to 3 hours with the possibility for an overnight stay;
- **Mental convalescence destination:** Karklė;
- **Recommended starting point:** The graveyard of Karklė village, Kretingalė eldership, Klaipėda District municipality;
- **GPS:** 55°48'26.8"N, 21°04'00.4"E;
- **Wellbeing host:** Igoris Osnač.



2nd Stop. Birdwatching on the Curonian Spit

One of the most critical migration routes for birds in the Northern Hemisphere stretches along the shores of the Baltic Sea. The Eastern Atlantic flyway runs along the entire Lithuanian Baltic Sea coast, including the Curonian Spit. In the autumn, the spit is teeming with southbound migratory birds – cranes, geese, ducks. Up to half a million birds fly over the spit in one day. The most intensive bird migration over the Curonian Spit takes place in September. However, there are still large flocks of migratory birds in October as well. Common cranes are grey in colour but have very graceful, memorable body shapes.

Grey cranes are probably the most attractive migratory birds in Lithuania for birdwatchers. Most grey cranes nesting in Lithuania return to this country by the end of March and leave it from mid-September to mid-October. Spring migration occurs over a wider area, making it challenging to observe. Meanwhile, the southbound grey cranes mainly follow the seaside and the lagoon coast, and with their distinctive flight, graceful descent at dusk, and their sounds, bring delight to attentive and curious coastal visitors.



- **Approximate time required:** 3 to 4 hours;
- **Mental convalescence destination:** Juodkrantė;
- **Recommended birdwatching point:** Avikalnis dune beauty spot.
- **GPS:** 55°30'49.3"N, 21°06'37.9"E.

3rd Stop. Mental convalescence on the beaches and in the dunes of the Curonian Spit

Neringa seaside resort is famous far outside Lithuania for the Baltic Sea beaches. They are some of the cleanest and broadest sandy beaches in the entire Baltic Sea Region. Not surprisingly, the beaches of Neringa are regularly listed among the TOP 100 best beaches in the world in various selections (by Lonely Planet, The Sunday Times, TripAdvisor, etc.) along with beaches in Brazil, Australia and other exotic destinations. These are very wide, clean and medium-grained sandy beaches stretching for almost 50 km along the Baltic Sea on the Curonian Spit, ideal for passive and active leisure.

Two Baltic Sea beaches in Neringa - the central beach of Nida and the central beach of Juodkrantė - regularly receive the international Blue Flag award, which testifies to the exceptional quality of the environment at these beaches. Furthermore, in the TOP 100 lists of the world's best beaches, Neringa's beaches are often presented as the best place for a variety of family activities or activities of wellbeing enthusiasts, as well as an ideal place for active seekers to "hang a hammock in the seaside pine forest" and enjoy the smells of the forest, tranquillity, and waves.

- **Approximate time required:** 6 to 8 hours (depending on the activities one chooses);
- **Mental convalescence destination:** Juodkrantė central beach;
- **GPS:** 55°32'45.7"N, 21°05'59.4"E;
- **Mental convalescence destination:** Nida central beach;
- **GPS:** 55°18'49.7"N, 20°59'01.8"E



4th Stop. Nordic walking on the Curonian Spit

In addition to its idyllic tranquillity, the Curonian Spit provides numerous opportunities for hiking and Nordic walking in the forests and dunes. Nordic walking can be practised by non-sports people as a health-promoting physical activity. Nordic walking on the Curonian Spit is an excellent form of physically active leisure for people seeking health benefits, combining them with the bliss of enjoying the most beautiful landscape of Lithuania.

Ever more people are discovering this form of active leisure as a superb way to promote mental well-being and health, suitable for people of all ages. Self-guided nature trails, the coastal promenade, and forest trails on the Curonian Spit are ideal places for Nordic walking. If a walker is appropriately dressed, Nordic walking can be practised in any weather, at any time of the year, by walking on forest trails.



- **Approximate duration:** 1 to 2 hours;
- **Mental convalescence destination:** Forests around Nida;
- **Recommended starting and ending point:** Nida town library. Nida town, Neringa municipality;
- **GPS:** 55°18'40.5"N, 21°00'36.2"E;

Source: SB Well, a cross-border cooperation project of the Interreg South Baltic 2014-2020 Programme



Figure 4. Birdwatching tourism offers integrated into a sustainable coastal tourism system (Lithuania)
(Credit: Ramūnas Povilanskas)

4. WINE THERAPY TOURISM OFFER AND PRODUCTS

INTRODUCTION

Enotourism (wine tourism/vinitourism) — travel experiences centred on vineyards, wineries, and wine culture and heritage — typically include winery tours, cellar visits, tastings, harvest participation, culinary pairings, vineyard walks, hospitality, and education. It is a type of leisure travel whose primary purpose is to visit vineyards and wineries to taste, learn about, consume, and purchase wine and related products, often accompanied by heritage-based gastro-nomic experiences and cultural interpretation. If deliberately designed as a nature- and culture-based healing experience, wine therapy tourism can become an effective, low-side-effect complement to conventional mental-health con-valescence services.

The South Baltic coastal region (coastal areas of Denmark, Germany, Lithuania, Poland, and Sweden) is well placed to develop such offerings because of its accessible coastline and growing boutique viticulture. The South Baltic coastal region has nascent and emergent viticulture, and good coastal tourism infrastructure that can be re-oriented to longer stays and slow itineraries. Building such a system in the South Baltic coastal region leverages coastal (blue) and rural (green) resources, a growing local wine and gastronomy scene, and EU cross-border funding mechanisms. To realise this potential, planners must address seasonality and climate constraints, ensure safe and evidence-based therapeutic design (avoiding medicalising alcohol), build infrastructure and cross-sector partnerships (tourism, health, environment), and adopt monitoring measuring wellbeing outcomes and sustainability.

SCOPE

Mental convalescence system (in tourism context) is a coordinated set of place-based activities, service protocols, and environments that aim to help people recover or stabilise mental health (reduce stress, improve mood and psychological resilience, re-establish routines) through structured experiences — drawing on principles from wellness tourism, therapeutic landscapes, and nature-based interventions. Wellness tourism evidence shows travel can produce measurable wellbeing benefits when activities are structured and evidence-informed. When positioned as a mental convalescence system, enotourism is intentionally packaged and delivered to support psychological recovery and wellbeing (stress reduction, mindful attention, social reconnection, restorative contact with nature) rather than only recreation or commerce.

When integrated with wellness, curated hospitality, and therapeutic design (guided nature walks, mindfulness in vineyard settings, low-intensity physical activity, social group sessions, mindful wine tasting, vineyard work therapy, other creative and cultural activities), this specific segment of enotourism can function as a low-intensity mental convalescence system – a wine therapy (enotherapy) tourism sector dedicated to deliver restorative, psycho-social, and economic benefits. Hence, wine therapy tourism is a set of tourism products and place-based coordinated experiences in a curated sequence of nature exposure, safe social connection, light physical activity and controlled gastronomic and wine experiences.

Enotherapeutic activities may also include a set of structured sensory and social experiences (such as relaxing solo vineyard walks), wellness services (including spa treatments and breathing and relaxation sessions), and accommodations that support recovery and respite. This model emphasises nature-based, low-intensity therapeutic activities rather than alcohol as treatment. It positions enotourism as a form of nature-based, cultural wellness tourism that can complement clinical services, support recovery from stress, burnout and mild-to-moderate mental health conditions.

Hence, wine therapy tourism offers a deliberate tourism product (package, place, protocol) that utilises vineyard landscapes, winery settings, and associated coastal and rural environments to deliver a sequence of therapeutic experiences for short-term convalescence or relapse prevention. Core components: restorative environment exposure (vineyards, beaches, dunes), guided therapeutic activities (mindfulness, nature walks, horticulture, and therapeutic gardening), low-impact physical activity (walking, cycling), moderated social experiences (small group tastings, storytelling), and clinical linkages (referral pathways, screening, and safety protocols). This reframes wine therapy from a purely recreational activity to a health-promoting tourism experience while retaining local cultural authenticity.

Key components of the wine therapy tourism model:

- ❖ **Natural exposure:** timed, structured presence in vineyards/coastal landscapes;
- ❖ **Activity design:** low-intensity exercise (walking), sensory stimulation (smells, tastes, birdsong), arts/culture and gentle social interaction;
- ❖ **Professional linkages:** pathways to mental health practitioners and clear referral and counter-indication guidelines;
- ❖ **Place quality:** quiet, biodiverse, safe vineyard settings with supportive hospitality;
- ❖ **Monitoring and evaluation:** validated wellbeing metrics and feedback loops.

Sector overview — typical actors and value chain:

- ❖ **Primary producers:** small and medium family wineries, newer vineyard projects (northern viticulture);
- ❖ **Service providers** include tasting rooms, hospitality (B&Bs, boutique hotels), regional spas/wellness centres, guided-experience operators, and transport providers;
- ❖ **Support institutions** include local and regional tourism boards, health and social services, vocational training centres, as well as quality certification bodies;
- ❖ **Demand profile:** wellness-oriented travellers, domestic short-break visitors, cross-border day-trippers, niche international enotourists interested in emerging wine regions.

ESSENTIAL NEEDS TO DEVELOP WINE THERAPY TOURISM OFFERS

1. Integrated wine therapy tourism product design

- Professional skills to develop standardised wellness and wine therapy tourism packages (e.g., 2–5 day convalescence breaks) that combine low-alcohol or alcohol-optional tasting, guided mindful tasting sessions, nature walks in vineyards/coast, light physical activity, nutritional gastronomy, and optional light therapeutic services (massage, breathing therapy);
- Frameworks that convert vineyards and coast into therapeutic itineraries (modules: nature immersion, sensory mindfulness, social therapy, hospitality);
- Commitment to design off-season products (wellness retreats, indoor tastings with coastal views, workshops) to stabilise winery income;
- Professional skills to develop clinical or wellness partner protocols for counter-indications to alcohol, dosage guidance, partnerships with local health providers for referrals and emergency plans so offerings are safe for visitors with mental health needs;
- Packaging of multi-day convalescence programmes combining vineyard, coastal and small-town experiences (sleeping near the coast, daytime vineyard therapy, evenings with moderated tastings).

2. Skills, standards, and certifications

- A training programme for winery hosts, guides, and sommeliers in wine therapy interpretation techniques, sustainable guiding programme design, slow tourism, safe wine consumption practices, trauma-informed service, basic mental-health literacy and psychological first aid, de-escalation, and nature-based intervention delivery that support mindful engagement;
- A training programme for winery hosts, guides, and sommeliers in multilingual interpretation and digital booking and marketing, as well as privacy and ethics;
- A South Baltic regional quality and health-safety standard and certification that labels the wine therapy experience as a “mental-convalescence enotourism” product (e.g., “South Baltic Enowell certified”) covering therapeutic safety, environmental sustainability, and visitor experience metrics;
- A monitoring framework using validated wellbeing assessment instruments (e.g., short pre- and post-visit satisfaction and customer wellbeing scales).

3. Infrastructure, accessibility, and seasonality

- Multimodal transport linking coastal towns to vineyard sites (last-mile access from towns, signage, shuttle services, bike and slow mobility routes, public transport timetables adapted for tourism seasons);
- Accessible visitor facilities (universal design, including those for people with mobility needs), quiet zones, trailed routes, including paths through vineyards and coastal trails, seating, toilets, and indoor spaces for inclement weather;
- Year-round accommodations and wine therapy facilities (heated tasting rooms, indoor therapy spaces), transport links, and off-season extension measures (shelters, indoor programming) to counteract South Baltic seasonality.

4. Cross-sector governance

- Daily cooperation partnerships among wineries, health services, tourism boards, conservation agencies and EU programme managers to co-design and fund pilot projects;
- Applied research partnerships with regional universities;
- Liability frameworks for therapeutic activities on private farmland (vines), data privacy for participant wellbeing screening, and medical referral pathways;
- Cooperation networks between tourism boards, health services, winery associations, and regional development agencies to access EU funds and align regulations;
- Cross-border partnerships and business support for micro-enterprises.

5. Sustainable viticulture and landscape management

- Advice and funding for cold-climate varieties, soil and water management, and biodiversity measures (hedgerows, mixed plantings) to enhance the restorative quality of landscapes;
- Practices to avoid pesticide overload, which reduces biodiversity and can harm the visitor experience.

MAIN BENEFITS OF DEVELOPING WINE THERAPY TOURISM OFFERS

1. Mental and physiological health benefits

- Nature-based tourism that combines vineyard exposure, mindful activities, and gentle exercise has been shown to have documented benefits, including reducing stress, anxiety, and depressive symptoms, as well as improving cognitive restoration;
- Vineyard walks and coastal landscapes mitigate cognitive fatigue and support restoration—a consistent finding in the wellness tourism literature. Embedding therapeutic design in enotourism leverages these mechanisms (attention restoration, decreased cortisol, social bonding);
- Systematic reviews and the World Health Organisation's 'white papers' report consistent positive relationships between access to open semi-natural landscapes and reduced stress, lower depression risks, improved concentration, and better subjective wellbeing. Integrating vineyards with sea and coastal access amplifies those restorative stimuli (views, air, smells, biodiversity, birdsong);
- Guided tasting uses attention, narrative and ritual, which can cue mindful states and positive emotion (enhanced mood, momentary stress reduction). Evidence suggests that structured, sensory food and wine experiences, when combined with interpretation, offer mental benefits;
- Furthermore, research and practitioner reports identify mental benefits from wine region experiences, including relaxation, social connectedness, sensory enrichment, cultural meaning, and stress reduction, when delivered in mindful, non-excessive contexts; learning about terroir and craft often increases life satisfaction, creates enduring memories, which supports psychological recovery. Structured programmes, e.g., sensory therapy, gardening and viticulture activities, can intentionally target mental convalescence and social support.

2. Economic and community benefits

- Wine tourism in selected South Baltic coastal hinterland sites already involves multisensory, social and place-based experiences (landscape, tasting, storytelling) that map well onto mechanisms known to support psycho-social and cultural integrity: social connectedness, ritualised tasting (mindfulness), and engagement with nature, slow food and slow travel;
- Wine therapy tourism services can further diversify rural economies, with specialised packages (wellness weeks) lengthening tourist stays on the South Baltic coast (complementing beach and wellness tourism), and create local employment in hospitality, interpretation, and small-scale production. Boutique wineries also strengthen regional branding and agritourism circuits;
- Wine therapy tourism services create niche hospitality and guide jobs, and strengthen regional branding. Existing small wineries on the Baltic coast already attract visitor interest, indicating market demand;
- Additionally, wine therapy tourism enhances local identity, supports local artisanal food and wine-related production, and promotes cultural events that foster social inclusion and intergenerational engagement.

MAIN DEFICIENCIES AND RISKS OF WINE THERAPY TOURISM OFFERS

1. Seasonality and small scale of producers

- Northern coastal viticulture is seasonal, with limited visitor infrastructure and capacity constraints at small wineries affecting programme scale;
- Many wineries operate seasonally, impacting year-round offerings and necessitating product diversification (e.g., indoor interpretation and culinary events);
- The northern maritime climate constrains grape varieties and shortens the growing season, leading some producers to rely on hardy hybrids and protected-site microclimates;
- Coastal visits cluster in summer, resulting in low off-season viability;
- Many small, boutique wineries lack hospitality capacity, requiring investment in lodging, interpretation, and service skills.

2. Fragmentation and lack of coordination

- The current landscape is characterised by many small producers and few networks, limiting the ability to deliver standardised therapeutic offerings and market them internationally;
- Cross-border fragmentation among the five South Baltic countries leads to regulatory and marketing challenges impacting visitor experience and safety without coordinated branding and interoperable standards;
- Governance is fragmented, making cross-border coordination difficult due to differing funding cycles and national regulations;
- Many South Baltic wineries are boutique and may lack accessibility or therapeutic-grade facilities, contributing to the overall fragmentation of supply.

3. Public-health risks from alcohol and limited positive evidence base

- Alcohol is linked to various diseases, with no completely safe consumption level. Any health-oriented product featuring alcohol must manage risks, inform participants, and offer alcohol-free options, especially for those with health vulnerabilities;
- Programmes should prioritize non-alcoholic restorative activities and harm minimization, limiting alcohol consumption during therapeutic sessions. Collaborative efforts with health providers should promote nature-based interventions over alcohol prescriptions;
- There is limited direct evidence connecting wine tourism to significant mental health improvements. Most support is derived from broader wellness and nature-based tourism studies, necessitating local rigorous evaluations to validate health claims;

- The intersection of alcohol and mental health creates potential liability. Mixing therapeutic intent with alcohol use can pose risks, including counter-indications issues, particularly without established protocols;
- While early studies on blue-space therapies show promise, there is a lack of rigorous controlled trials in tourism settings. Monitoring and evaluation are essential;
- There is limited region-specific research documenting mental well-being outcomes from enotourism, making it challenging to meet funding and health partner requirements for strong evidence.

4. Limited awareness of risks and the necessity for training

- If poorly planned, new vineyard expansions could harm sensitive coastal ecosystems (e.g., Natura 2000 sites). Sustainability must be integral;
- Vineyard conversion and tourism pressure can create land use and biodiversity concerns if not managed with regenerative practices;
- Winery staff often lack training in working with vulnerable guests, in behaviour de-escalation, or in safe alcohol-service practices beyond hospitality norms;
- Winemakers and hospitality staff typically lack training in wellbeing-oriented programming, accessible design, and medical referral procedures;
- Hosts and wine professionals lack training in mental-health support and nature-based therapy methods.

BEST PRACTICES OF WINE THERAPY TOURISM OFFERS

1. Design principles (product and experience)

- Involve psychologists, general practitioners, winery owners, accommodation providers, patients, and user groups to set realistic aims and safety measures for the development of the wine therapy offer;
- Start with low-arousal nature exposure (coastal breathing exercises, vineyard walks), progress to gentle activity (pruning demonstration, vineyard yoga), and end with moderate sensory experiences (non-excessive tastings paired with local food);
- Emphasise tasting formats (small pours, food pairing, education) and optional non-alcoholic alternatives; include explicit messaging on safe consumption limits; ensure that wine therapy programmes target low-risk respite and wellbeing rather than clinical treatment;
- Leverage local narratives (heritage, terroir, coastal traditions) to build meaning and social connection — a therapeutic benefit;
- They must be prominently available and integrated into wellbeing modules (see Case Study 3);
- Schedule quiet times, silent walks, birdwatching, therapeutic horticulture and blue space access (beach, skerry, cliff, or estuary). These are the mechanisms most clearly linked to mental restoration.

2. Sustainable landscape and climate adaptation practices

- Promote cultivar mixes (hybrids and cold-tolerant varieties), agroecological measures (hedgerows, cover crops) to boost biodiversity and sensory richness. Encourage small-scale agroforestry or mixed-fruit plantings to extend the season and offer variety (local berry wines are typical in the Baltics);
- Integrate landscape conservation practices (biodiversity corridors, low-input viticulture, and coastal dune protection) into product design to maintain a restorative environment;
- Cherish regenerative viticulture (soil health, biodiversity) and manage visitor flows with booking systems and capacity limits to preserve landscapes and local quality of life;
- Apply low-impact practices in vineyards to preserve the restorative quality of places;
- Avoid overtourism of fragile coastal dunes and vineyard microhabitats;
- Partner with university research groups and northern winery practitioners for sustainable landscape and climate adaptation advice.

3. Training and capacity building

- Offer short accredited courses for winery staff and hosts focused on therapeutic mental-health awareness, de-escalation, accessible guiding, multisensory experience design, safe alcohol service, and hospitality for vulnerable groups;
- Create a regional, cross-border micro-credential for “therapeutic enotourism facilitator” that covers risk assessment, first aid and ethical hospitality;
- Limit the trainee group size and ensure facilitators are trained in mental health first aid.

4. Marketing, product packaging, and distribution

- Create multi-day “coastal enowell” itineraries combining vineyard mindfulness, coastal nature walks, regional food, light exercise (yoga and walking), and creative workshops;
- Provide clear messaging about health objectives and who the offers are (e.g., stress-reduction retreats and not medical rehabilitation); emphasise non-medical, nature-based recovery and rest;
- Develop a centralised cross-border booking platform for certified offers;
- Do not present wine therapy as a standalone treatment for major psychiatric disorders; it is only an adjunctive, preventive and restorative approach for mild-to-moderate stress, burnout, and subclinical depression and anxiety in appropriate clients;
- Market explicitly to wellness and slow-travel segments; collect pre- and post-wellbeing data on a representative sample to evaluate the impacts; partner with universities for longitudinal studies;
- Use storytelling that emphasises low-alcohol, mindful experiences and landscape restoration;
- Connect South Baltic coastal wellness and boutique wine in storytelling (slow-tourism, beautiful seascapes, biodiversity); leverage different South Baltic coastal tourism networks for multi-site routes;
- Focus on the domestic urban residents seeking short restorative breaks, Nordic and German wellness tourists, and professional groups (corporate resilience retreats).

5. Safety and public-health protocols

- Establish mandatory health screenings for individuals when applying the "convalescence" label; offer clear guidance on driving and transportation after wine tastings;
- Exclude active alcohol-use disorder, severe psychiatric instability, or medical conditions that counter-indicate travel. Include clear referral pathways;
- Collaborate with local healthcare providers for referrals; cite World Health Organisation evidence when developing messages about alcohol risks;
- Take serious care to ensure host insurance and liability coverage that includes guided therapeutic activities, emergency procedures, and referral pathways to local health services by standardising informed consent for wellbeing modules;
- Ensure reliable protection for participant health data and transparent reporting of outcomes;
- Create wine therapy programmes that respect local attitudes towards alcohol and health, and offer alcohol-free and low-alcohol wine therapy variants.

6. Reducing seasonality and increasing accessibility and appeal

- Develop indoor interpretive centres, year-round gastronomy events, and coastal-vineyard cycling routes with partner accommodation (Figure 5);
- Offer off-season retreats and harvest campaigns in autumn to smooth demand across seasons;
- Adapt trails, tasting rooms and accommodation for mobility needs and sensory sensitivities;
- Incentivise low-input, biodiverse viticulture through agri-environment schemes to improve the landscape’s therapeutic value (higher biodiversity leading to more substantial convalescence benefits).



Figure 5. South Baltic winery Winnica Mitumi (Nowe Polaszki, Poland; Credit: Winnica Mitumi)

7. Monitoring and success indicators

- Number of wine therapy specialists trained and accredited;
- Number of wine education facilitators and winery guides trained and accredited;
- % of wine and related products with verified origin and labelling;
- % of purely organic, certified wine and related products;
- Number of certified wine therapy packages (target per year);
- Percentage of wineries meeting accessibility and safety standards;
- Availability of multilingual information at the most visited sites;
- Incidence of alcohol-related intoxication and other adverse medical events (target: zero);
- Safety metrics: toxic reactions per 1,000 treatments (target: zero severe events);
- Other serious incidents related to alcohol, medical referrals per 10,000 visits (target zero);
- Visitor numbers and bednights in wine therapy tourism packages (seasonality shift);
- % of visitors choosing alcohol-free or low-alcohol options;
- Customer satisfaction (validated questionnaires pre and post visitation);
- Visitor repeat rate (target >40% repeaters);
- Additional revenue from tourism and product sales per participating service provider (€/year);
- Vineyard robustness metrics: winter survival rates of vines;
- Number of itineraries from the Baltic Sea coast to hinterland wineries;
- Number of specific northern grape varieties adjusted to the South Baltic coastal region;
- Number of training courses in wine therapy developed;
- Environmental indicators: habitat quality, species counts, and soil health in participating vineyards, as well as acreage under regenerative practices;
- Number and bednights of visitors (by winery and season);
- Local winery guide employment level (days/year);

- Level of community satisfaction;
- Number of additional local jobs created;
- Number of cross-border wine therapy tourism itineraries;
- Number of joint promotions and marketing campaigns;
- Participant-level wellbeing score change (pre- and post-validated metrics: e.g., WHO-5 Wellbeing Index, Perceived Stress Scale) averaged across visitors;
- Participant sleep quality change (short sleep questionnaire);
- Research outputs: number of peer-reviewed studies or transparent outcome reports;
- Collect both quantitative and qualitative data (participant narratives) to capture restorative experiences that numbers miss.

CASE STUDY 3. WINE THERAPY AND SPA CONVALESCENCE TOURISM (TUSCANY, ITALY)

INTRODUCTION

For anyone, with anyone, Tuscany is the region ample with mental and sustainable energy and new discoveries of thermal springs, historic towns and cities, fascinating classical scenery, traditional cuisine and unique wines, sunsets over vineyards and the sea that seal a sunny day with friends, slow food, and life, as well as mental and physical convalescence. From the top of the greenest mountains to the sea and islands rich in biodiversity, protected oases, parks, and a network of wellness itineraries to explore them, Tuscany is a breath of fresh air offering a dip that frees visitor's mind.

PURPOSE OF THE OFFER

Traditions, old-time flavours, and the pleasure of wandering the cobbled streets of world heritage towns offer an ancient recipe of wellness that never ceases to excite. There are many ways to recharge yourself, from meditative contemplation to more energising activities to experience – to fill visitor's lungs with clean air and begin the real journey: choose to be well. Tuscany, as a polythematic, reticular mental and sustainable tourism offer, offers the visitors cultural appreciation, mental wellbeing, spiritual balance, and harmonised physical health by combining:

- **Diversity of Experiences:** an exuberant selection of diverse wellness experiences at stopovers like thermal spas, world heritage towns, seaside resorts, and pristine national parks. These experiences provide a holistic approach to health;
- **Traditional and Modern Approach to Wellness:** Wellness offers at 22 Tuscan thermal spa towns are the mainstay of a complete wellness journey, relishing mindfulness, forest bathing, remedies, and beauty treatments while exploring the culture and beauty of historical towns;
- **Sustainability and Inner Peace:** Revealing the natural beauty and cultural meaning of the plentiful vineyards and hilly landscapes with magnificent vistas over the Ligurian and Tyrrhenian seas while promoting eco-friendly and healthy travel focused on inner harmony;
- **Slow Travel:** Combines active experiences like hiking and birdwatching with slow, immersive experience in natural and cultural settings, including Tuscan traditions and cuisine, cherishing moments of reflection and relaxation.

THE OFFER HIGHLIGHTS THESE WELLNESS-RELATED ASPECTS:

- **Connecting Wellness with Slow Lifestyle:** The offer encourages travellers to slow down and engage with the environment, emphasizing spiritual balance and mindfulness;
- **Importance of Healthy Regional Cuisine:** The offer focuses on agritourism, farm-to-table dining, vino-therapy, and wellness experiences in rural settings;
- **Combining traditional and state-of-the-art mental and sustainable:** This diversified 'new' tourism requires a broader range of wellness and heritage experiences, knowledge-based treatments, and creative interaction with the wellness hospitality offers;

- **Polythematic thalassotherapy:** Activities designed around coastal areas and thalassotherapy using the therapeutic benefits of the sea, combining saltwater treatments, seaweed wraps, and beach yoga with sea-side thermal springs and sea-to-table cuisine.

MAIN DESTINATIONS AND THEIR WELLNESS OFFERS (FIGURES 47, 48 AND 49)

1. Florence is the capital of Tuscany and a charming World Heritage city; visitors can experience wellness by tasting healthy cuisine, relishing a glass of Chianti, immersing themselves in art therapy at the Uffizi, convalescing in a day spa, or indulging in active outdoor activities in the city's parks and peri-urban woods.

Mental convalescence offers:

- **Wellness in a Heritage City:** Focused on the harmonious union of the four elements (water, earth, fire, and air), spas in Florence offer wellness programmes for a few hours or a day of relaxation;
 - **Asmana Wellness World** is Italy's largest wellness centre, a peaceful oasis nestled in Villa Montalvo, an urban parkland of Florence offering a unique sensory experience;
 - **Foreste Caserinesi National Park:** Forest bathing (shinrin-yoku) with the association "La grande via" in a peri-urban national park just 60km away from downtown Florence.
2. Chianti Wine Region: The Chianti Classico label is reserved for wines with the oldest roots from the production area in two provinces, Florence and Siena. It is a wine brand recognized around the world. Visiting the Chianti Classico production area also means discovering magnificent landscapes, villages, and scenery of extraordinary beauty (see Figure 48).

Mental convalescence offers:

- **Wine Rituals:** Wine wellness retreats and vineyard yoga, vinotherapy (caring for vineyards) as active mental convalescence, hydromassage bath with water and red wine, grape pomace (pulp) wraps;
 - **Wine Country Wellness:** The harmony of nature envelops the ancient parish churches that gently rise from the hills. In these places of spirituality, the soul breathes deeply.
3. Montecatini Terme: In 2021, this one of the most famous Italian spa towns became part of the transnational "Great Spa Towns of Europe" UNESCO World Heritage Site because of its famous mineral springs and its architecture, which exemplified the popularity of spa resorts in Europe during the 18th through 20th centuries.

Mental convalescence offers:

- **World Heritage Balneotherapy:** There are 11 thermal springs around Montecatini Terme, with temperatures ranging from 24°C to 33.4°C. Of those, six springs with sulphuric water have been traditionally used for their therapeutic qualities;
 - **Carmignano Wine Region:** A renowned regional Tuscan wine enjoyed in the Medici Carmignano wine offer is the best ambassador for the beauties of the Montecatini area, from Etruscan necropolises to period buildings and marvellous scenery.
4. Lucca is one of Tuscany's most beloved artistic cities in the centre of the Lucca plain, a breathtaking landscape dotted with medieval and spa towns; Lucca is also one of the most spiritual places in Tuscany, a city of 100 churches, with stories, mysteries and strange apparitions that have been handed down through the centuries.

Mental convalescence offers:

- **Heritage-based convalescence:** a unique mindfulness experience awaits a wellness seeker on top of the Guinigi tower with a little garden, full of trees, and an astonishing panorama over the whole Lucca plain;
- **Bagni di Lucca:** home to renowned royal thermal springs and the first gambling house in the world, the spa town hosts the Jean Varraud establishment with 54°C hot mineral water, steam caves, mud therapy, hydromassage, inhalations, and beauty treatments;

- **Farm-to-Table Wellness Cuisine:** wellness seekers in Lucca can indulge in a guided journey in the company of a chef and delve into the concept of healthy vegetable cuisine with dinner tasting.
- 5. Tosco-Emiliano Apennine National Park boasts an extraordinary wealth of environments, from beech woods to chestnut groves, lush, green meadows and pastures, lakes, rivers and waterfalls, home to deer, wolves, and golden eagles, renowned for the local quality products.

Mental convalescence offers:

- **Active leisure in the national park:** guided adventure trekking in the Apennines, cycling, rafting, kayaking, horseback riding offers, wildlife observation and nature walks;
- **Shinrin-yoku:** guided forest bathing in unique highland broad-leaved chestnut woods of Garfagnana, at Casa Cantoniera station on the Cerreto Pass;
- **Farm-to-Table Wellness Cuisine:** The tourist value of the national park also focuses on the typical products of the area such as Lunigiana Honey or Garfagnana Farro (an Italian fruit and vegetable product).
- 6. Pisa and its uniquely beautiful Piazza dei Miracoli, with its renowned cathedral and tower, have been a UNESCO World Heritage site since 1987. This medieval World Heritage town blends historical heritage walks, local wellness traditions, and Pisan cuisine workshops for holistic cultural immersion.

Mental convalescence offers:

- **Bagni di Pisa hot springs:** a luxury wellness resort in San Giuliano Terme, a spa town between Pisa and Lucca, famous as a convalescence place of royals in the 19th century;
- **Marina di Pisa:** A piece of paradise on the Pisan coast, provides a variety of mental and sustainable offers, including San Rossore, Migliarino, and Massaciucoli Regional Park;
- **Uliveto Terme:** thermal waters rich in sulphur at a temperature of 36°C feed a large thermal pool and spa facilities offering balneotherapy, hydromassages, aerosols and beauty treatments. Acqua Uliveto is a popular mineral water brand bottled since 1835;
- **Farm-to-Table Wellness Cuisine:** Pisan cuisine is characterised by healthy dishes prepared with the best local ingredients, such as olive oil of the Pisan Mountains accompanied by the best Tuscan wines like Chianti or Bianco Pisano di San Torpè.
- 7. Versilia Turistica: The area comprising the seaside resorts of Forte dei Marmi, Lido di Camaiore, and Viareggio and their hinterland of Pietrasanta, Seravezza, Stazzema, and Massarosa; it does not fully coincide with the historical region of Versilia.

Mental convalescence offers:

- **Forte dei Marmi** is an upper-end seaside resort whose mental and sustainable offers include luxury seaside spas with thalassotherapy treatments as well as hiking and biking among the historic villas immersed in the green garden-city "Roma Imperiale";
- **Lido di Camaiore** is a gorgeous and elegant seaside resort overlooking the wide beach of Versilia; due to its beauty, it attracted the Italian upper class and bohemia and still preserves its scenic appeal;
- **Viareggio:** The carnival city is one of the best-known seaside destinations in Versilia; its mental and sustainable offers are in the sectors of thalassotherapy and herbalism;
- **Sea-to-Table Wellness Cuisine:** from a starred restaurant to a trattoria, one denominator of authentic local seafood of Versilia is the highest quality ingredients sustainably harvested from the Ligurian Sea.
- 8. Livorno: Bridges, canals, and historic palaces are reflected in the calm waters, making it feel like a little Venice on the Ligurian Sea. Its history, culture, blazing sunsets, clear and fragrant air, sea sports, and culinary traditions are all connected to the sea.

Mental convalescence offers:

- **Ligurian Thalassotherapy:** luxury spas with seawater pools and salt caves and a wide range of beauty services (including the application of marine mud and algae creams);

- **Sea-to-Table Wellness Cuisine:** The main dish of Livorno cuisine is *Cacciucco*, which is not a simple fish soup, but a mixture of different fish.
- 9. Elba Island is the legendary home chosen by the Roman goddess of beauty, Venus; it hosts rustic fishing villages, rugged coastlines, and dreamlike beaches of the Ligurian and Tyrrhenian seas, with crystal-clear waters for a refreshing swim.

Mental convalescence offers:

- **Terme di San Giovanni:** a seaside spa with a basin from which salt-iodic water, silt and thermal marine algae are taken for wellness treatments like salt-iodic inhalations and nebulisation to cure the upper and lower respiratory tract ailments;
- **Outdoor mental and sustainable activities:** Due to its small size, rugged landscape, and magnificent vistas over the Ligurian and Tyrrhenian seas, Elba Island is a paradise for self-guided mountain hiking and cycling aficionados.
- 10. Monte Argentario is a magnificent headland surrounded by the sea and connected to the coast by two artificial dams. It attracts tourists for its unique landscape, marine environment, and exceptionally mild climate, which makes it an ideal year-round holiday destination. A holiday resort known for its numerous beaches and coves, it is also rich in history.

Mental convalescence offers:

- **Porto Santo Stefano** is a picturesque seaside resort with a beautiful seaside promenade and a plethora of possible places to go trekking and mountain biking in the hills;
- **Porto Ercole**, with narrow alleyways and cosy seaside houses with the splendid Feniglia beach and many coves, is widely appraised as one of Italy's most beautiful villages;
- **Argentario Lagoon Resort & Spa:** a luxury wellness eco-retreat in the woods of Monte Argentario offering spa and beauty treatments, peace, and tranquillity in silent nature;
- **Sea-to-Table Wellness Cuisine:** In terms of food and wine, the local cuisine combines authentic flavours of both land and sea, but it is undeniably the sea that provides the fundamental ingredient for the local dish *par excellence* – fish soup.
- 11. Saturnia: supposedly the oldest town in Italy, it hosts a cluster of mental and sustainable facilities in its environs. These facilities are based on the healing sulphurous thermal water springs at 37°C, which have renowned therapeutic properties. They offer relaxation and convalescence to the body by alleviating stiff muscles and giving tissues greater elasticity.

Mental convalescence offers:

- **Terme di Saturnia SPA & Golf Resort** is one of the most renowned Italy's spa destinations, offering patrons an escape from the stress of daily life and immersing in a transformative experience of luxury and relaxation, harmony between mind, body and soul;
- **Terme di Saturnia – Parco Termale:** thermal baths, hydromassage tubs, cardiovascular hydrotherapy products, a Finnish sauna, and facilities for beauty treatments make the wellness facilities some of the largest and most popular in Italy;
- **Cascade del Mulino:** a free-to-use cascade of sulphurous thermal water streams creating inviting pools of hot water and snow-white waterfalls surrounded by the beautiful countryside for relaxation (Figure 49).
- 12. Siena: The charm of this medieval city does not stop at its rich medieval World Heritage; immersed in history and traditions, this town offers visitors numerous experiences dedicated to relaxation and wellbeing, including mindfulness walks in the city's gardens.

Mental convalescence offers:

- **Terme San Giovanni** is a thermal spa close to Siena with thermal pools, beauty, inhalation, balneotherapy and mud therapy treatments conducted with sulphurous-bicarbonate-calcium thermal waters of 40°C;

- **Rapolano Terme** is an Italian town close to Siena with Terme Antica Querciolaia in the heart of the historic centre famous for its soothing hot springs and mud baths, among hilly vineyard landscapes;
- **Heritage-based convalescence:** surrounded by the evocative hilly landscape of Tuscany, Siena is famous for traditional wellness practices in the UNESCO World Heritage cityscape, which connect visitors to heritage and enhance the sense of enrichment.
- **Nobile di Montepulciano Wine Region:** this wine is today one of the most prestigious wines in the world, best with typical dishes of the Valdichiana area; wellness seekers can relish combined experiences of wine tasting and spa treatments based on Vino Nobile;
- **Terme di Montepulciano:** sulfuric and bromidic thermal waters are used for healing and convalescence in an oasis of the romantic *Grotta Lunare* (Moonlight Cave) for relaxation of body and mind, holistic massages, and healing mud balneotherapy.

13. Chianciano Terme is among the finest health resorts in Italy with its parks, numerous hotels and many healing thermal water springs; among the more notable spas are Acqua Santa, Acqua Fucoli, Acqua Sillene, Acqua Santissima (treating respiratory problems), and Acqua Santa Elena (kidney problems).

Mental convalescence offers:

- **Thermal Spa:** therapeutic water of Chianciano Terme is reputed to cleanse the liver via an increase in the production and excretion of liver bile;
- **Bagni San Filippo:** a small spa town with healing sulphurous waters, where calcareous deposits form scenic white concretions of calcium carbonate and waterfalls;
- **San Casciano dei Bagni:** a guided tour in the Temple of Apollo combined with the visit to Fonteverde Spa (beneficial effects of thermal water with a hot bath in one of the most beautiful spas in Italy);
- **Brunello di Montalcino Wine Region:** a red DOCG Italian wine produced in the vineyards surrounding the town of Montalcino, in the province of Siena, is among the longest surviving Italian red wines.

14. Venturina Terme: Situated along the ancient Roman road Via Aurelia, Venturina Terme is a modern town developed around industrial, agricultural, commercial, and thermal activities. Agrotourism farms and pristine beaches of the Ligurian Sea surround the city.

Mental convalescence offers:

- **Thermal Spa:** mud baths, thermal water baths, massages, hydromassages, aerosols and beauty treatments, a large thermal pool with sulphur-rich curative water of 36°C;
- **Farm-to-Table Wellness Cuisine:** purple artichoke of Val di Cornia is a typical agricultural product of the area and an essential ingredient of local vegetarian and traditional cuisine.

15. Grosseto: In 2024, the European Commission selected Grosseto as the European Green Pioneer of Smart Tourism. This accolade recognizes small, non-traditional, and emerging sustainable European tourism destinations, and Grosseto was chosen out of 40 towns.

Mental convalescence offers:

- **Punta Ala (Relais & Châteaux Gallia Spa):** Caldarium and Frigidarium, a sensory bio-sauna and shower, hammam and saltwater pool, massages, aromatherapy treatments;
- **Marina di Grosseto:** Blue Flag beaches and marina, Green Flag award for accessibility, Maremma Natural Park, Terme Marine Leopoldo II convalescence retreat;
- **Woods-to-Table Wellness Cuisine:** Maremma is renowned for healthy and locally sourced natural food; it is famous for its prized mushrooms and blackthorns, as well as cheeses, such as ricotta and pecorino.
- **Castiglione della Pescaia:** beaches, natural parks, biking products, Etruscan archaeological sites, the natural reserve Diaccia Botrona with pink flamingos.

Source: N-B Well, a cross-border cooperation project of the Interreg South Baltic 2021-2027 Programme



Figure 6. Eco-adventure, Spa Treatments and Wine (Italy) (Credit: Ramūnas Povilanskas)



Figure 7. Chianti – a viticulture wellness region (Italy) (Credit: Ramūnas Povilanskas)

SUMMING UP

Apitherapy tourism presents the South Baltic coastal region with an opportunity to integrate coastal wellness branding with traditional apiculture, thereby supporting rural livelihoods and promoting biodiversity awareness. The economic and social benefits are real, but must be balanced with a robust safety, regulatory, and evidence-generation approach. Utilising cross-border cooperation to establish shared standards, pilot responsibly, and invest in training and research will maximise benefits while minimising risks.

Apitherapy tourism can diversify coastal and rural economies across the South Baltic while promoting pollinator conservation and offering novel wellness experiences. However, responsible growth depends on several steps: (1) building a regional safety and accreditation framework, (2) integrating clinical oversight and research to avoid exaggerated claims, (3) training and certifying operators, and (4) designing sustainable, season-aware tourism packages. A practical next step is a South Baltic pilot programme that establishes a code of practice, funds 4–6 pilot sites with monitoring, develops training modules, and commissions a small-scale clinical feasibility study to begin building the region's evidence base.

Recommendations for sustainable apitherapy tourism development

- ❖ **Start with low-risk wellbeing offers** with hive environments and bee products (hive-air rooms, honey spa treatments, education) while building medical governance for any invasive apitherapy. This balances demand and safety;
- ❖ **Develop cross-border standards** (screening, emergency protocols, accreditation) within a South Baltic cluster to foster consumer trust and enable SMEs to scale;
- ❖ **Invest in research & monitoring** to measure wellbeing outcomes and safety, and publish results rather than rely on anecdote. Peer-reviewed evidence is mixed and must be strengthened;
- ❖ **Protect bees and landscapes** — without healthy pollinators, the sector is not viable; apitherapy tourism should be explicitly linked to pollinator conservation programmes.

The South Baltic coastal region is rich in natural resources that are highly favourable for birdwatching tourism, which is seeing a surge in market interest across Europe. This area possesses significant ecological attributes, as well as policy frameworks such as Natura 2000, which are essential for establishing a well-coordinated and high-quality birdwatching destination. These elements not only support conservation efforts but also enhance local economies.

The region is home to internationally recognized bird habitats, ongoing nature tourism initiatives, and mechanisms for EU cross-border collaboration. These components provide a solid foundation for transforming the South Baltic into a prominent birdwatching destination, if management strategies are implemented thoughtfully. They could enable birdwatching to serve as a robust, year-round contributor to coastal economic vitality and nature conservation.

For birdwatching tourism to emerge as a strategic catalyst for sustainable coastal development, it must align with conservation objectives and involve robust cross-border coordination. This includes proffering professionalized tourism services and implementing evidence-based visitor management approaches. The effectiveness of these initiatives hinges on the balanced integration of market-driven strategies, such as product development, training for guides, and collaborative marketing efforts, alongside stringent conservation measures. These measures put the establishment of ethical guidelines, ongoing site monitoring, and the careful design of natural areas to minimize human impact.

It is crucial to focus on prioritizing conservation efforts, investing in infrastructure that is low-impact, and enhancing seasonal offerings. Coordinated actions across borders will ensure that birdwatching activities yield benefits for both local communities and avian populations alike. Efforts directed towards cross-border cooperation can open avenues for funding pilot projects, synchronize promotional messaging, and develop institutional frameworks necessary for scaling a premium birdwatching experience that harmonizes human interests with ecological sustainability.

To maximize both the social and economic advantages while ensuring the safeguarding of biodiversity, the region should actively pursue EU funding opportunities and leverage existing Natura 2000 frameworks. These

approaches will provide practical avenues for initiating pilot programmes, which can later be expanded to support broader objectives in birdwatching tourism and conservation.

The South Baltic coastal region is uniquely positioned to harness its natural assets and emerging viticulture to develop an innovative form of enotourism. This approach goes beyond traditional wine tasting experiences, aiming to create a comprehensive and ethical framework for mental wellness. By incorporating structured practices that prioritise mental health, the region can establish enotourism as a significant element of low-intensity therapeutic systems, but this will require thoughtful planning and implementation.

For enotourism to fulfil its potential as a mental convalescence system in the South Baltic, it is crucial that development is intentional and guided by public health principles. This includes establishing safeguards that protect the wellbeing of visitors, effective governance that transcends national borders, and a commitment to sustainable practices that preserve the land's ecological integrity. Continuous and rigorous monitoring will be essential in ensuring the success and safety of these initiatives.

Reconceptualising enotourism as a therapeutic avenue offers an exciting opportunity to integrate the documented mental health benefits derived from nature with the region's growing boutique wine offerings. This venture can be further supported by European Union initiatives, which often provide funding and frameworks for cross-border cooperation, enabling a robust infrastructure that fosters both tourism and wellness.

The combination of the region's institutional networks, such as Interreg South Baltic, alongside a collaborative network of local producers and health-oriented assets, creates an optimal environment for piloting and scaling integrated wellness offerings. However, success hinges on prioritising safety protocols, investing in comprehensive training programmes, and ensuring that the design process is inclusive and grounded in evidence-based practices.

Achieving this vision mandates an intentional approach to therapeutic design that is centred on natural environments while remaining mindful of alcohol consumption. It requires cultivating partnerships across various sectors, making strategic investments in infrastructure and educational resources, and establishing rigorous metrics to monitor both wellbeing and environmental impacts.

Effective governance across different sectors must support clinical safeguards, sustainable land management, and ongoing training for staff involved in this innovative tourism sector. The next critical phase involves developing a pilot programme, either through Interreg or national and regional frameworks, that applies the design principles, training needs, and evaluation strategies articulated above. To ensure successful outcomes, all stakeholders must commit to co-designing initiatives alongside health professionals, establish robust safety and training protocols, and leverage regional cooperation to facilitate the scaling of these innovative offerings.

Practical recommendations (valid for all three mental convalescence tourism sectors)

- ❖ **Pilot now, evaluate rigorously.** Start with small, multilateral pilots to test product designs and monitor their effectiveness.
- ❖ **Prioritise safety.** Integrate World Health Organisation guidance on mental health safety and limitations of complementary and alternative medicine into visitor information.
- ❖ **Train hosts in wellbeing facilitation.** Certification in mental-health literacy and disturbance-informed hospitality is essential.
- ❖ **Use landscape and coastal assets.** Combine apiary, birdwatching site, and vineyard experiences with coastal restoration, walks and slow mobility for stronger restorative outcomes.
- ❖ **Measure outcomes, not impressions.** Use validated wellbeing instruments in monitoring to demonstrate impact to funders and healthcare partners.