When translating helonyms from Latvian to English, translators encounter several terms with synonymic meanings that can be used as equivalents of the Latvian term *purvs*, although they specify the type of wetland more accurately: for example, *bog, fen, marsh, mire*, and *swamp*. As natural environments may vary significantly among different geographical locations, a wetland habitat found in one region may not exist in another. Currently, there is no comprehensive classification system that encompasses all types of wetlands around the world; and therefore, the equivalence of wetland names in the environmental terminology among various languages is often unclear. The present paper investigates whether the English translations of Latvian helonyms and the Latvian translations of the United States (US) helonyms are accurate and consistent regarding the available wetland terminology in each language. A total of 21 helonyms are analysed in the study but 4 are presented in the paper: *Raganu purvs, Platenes purvs, Manchac Swamp* and *Suisun Marsh*. The method of data collection used in the paper is term excerption, and the methods used for data analysis are contrastive and qualitative. The sources for excerpted terms referring to Latvian and the US helonyms are online tourism websites in both Latvian and English. The precision of the translation of helonyms and the type of wetland habitat were verified using the websites of the Nature Conservation Agencies of both countries and other texts related to the environment. The results suggest that when translating helonyms from Latvian to English, it is necessary to know the specific type of wetland habitat to be able to choose the appropriate English language term. In translations of helonyms from English into Latvian, the most frequently used word is the superordinate term *purvs*.

**KEYWORDS:** helonyms, wetlands terminology, term translation, contrastive analysis, purvs.
Although the Latvian word *purvs* is a concept that is not very topical in everyday language usage, and for a part of society, it is associated with a remote, forgotten place in nature, the concept of *purvs* is often used in both Latvian fiction and mythology, and it is linked to various stories. The true value of the concept of *purvs* in Latvian is revealed in the terminology of the environmental sector, where it is considered from both aspects, ecological and economic. As nature conservation is currently becoming increasingly important, and environmental issues are being addressed internationally as well, precise terminology of the environmental sector is essential.

Bogs, fens, and mires are an important part of the Latvian landscape, and compared to other European countries there are still some areas (4.9%) of untouched natural wetlands in Latvia, which have become popular as a tourist attraction in recent years (Dabas aizsardzības pārvalde, n.d.). Although the tourism industry is highly developed nowadays, translations of reference materials for tourists play an important role. Environmental terms are used quite frequently in texts on nature-based tourism, but their inaccurate use can give a wrong impression about Latvia’s natural environment and deprive the opportunity to educate about nature protection issues. This study draws attention to various reasons and nuances of potential inconsistencies, which must be considered when translating the environmental term *purvs* in both directions, from Latvian into English and vice versa.

The paper aims to examine the semantic field of the environmental term *purvs* in Latvian in contrast to English, by practically testing the applied theories and approaches of terminological accuracy to Latvian-English and English-Latvian translations of helonyms. The study provides a brief theoretical overview of the role of terms in language, focussing only on those aspects of terminology that are relevant to the issues addressed in the paper, and studies the terminology of the environmental sector in Latvia and the US. The classification of wetland habitats of both countries is compared, definitions of wetlands are studied, and the semantic field of the word *purvs* in Latvian and its equivalent in English is considered both from the aspect of general language use and from the terminological aspect. Although environmental terminology has been the research subject of several studies by scholars, for example, Sandra Kalniņa (2013, pp. 65–74; 2014, pp. 97–109) and Biruta Uzija (1986), until now, the classification of wetland ecosystems and translation problems has not been the focus of linguistic research and would be useful to conduct an in-depth study of the topic.

### Theoretical Background

Terminology is the most important part of the specialised vocabulary, and it also makes up a certain amount of the vocabulary of scientific articles. The *Explanatory Dictionary of Basic Linguistic Terms* describes the ‘term’ as a verbal designation of a concept of a particular thematic area and a special field, the term can be a word or a subordinate word-group that denotes a certain concept of the field as part of a system of concepts of the field (Valodniecības pamatterminu skaidrojošā vārdnīca (VPSV, 2007, p. 400). Alīse Laua (1969) explains that a term is a word that denotes a strictly defined concept of science and that retains the same meaning both within and outside the context of any given field of science. Therefore, Laua explains that the term is unambiguous, which is essential for the term to fulfil its intended function. Maria Teresa Cabré (in Gambier & Doorslaer, 2010, p. 357) views it differently, arguing that in linguistics, a term is a lexical unit whose specific meaning is revealed when it is used in a certain pragmatic context or a particular linguistic usage. In this respect, the translator needs to realise when the translation difficulty is related to terminology, i.e., the translator must be able to identify that the word in the text is a term.

Here, an important factor should be mentioned that provides a better understanding of how a term differs from the rest of the vocabulary: when considering the meanings of words, one usually refers to explanations, but in the case of terms, one refers to definitions, which in the electronic dictionary site Tezaurs.lv is explained as a brief formulation of the content of a concept, the essential features of an object. Therefore, the definition is more concise, and it denotes the essence of the concept more precisely, while the explanation is much broader. The VPSV (2007, p. 176) describes ‘concept’ as the reflection of the essential features of objects and phenomena in consciousness, in linguistics it is used as the semantic basis of linguistic categories, but in scientific terminology, the concept is perceived as a substantial ground for the selection and comprehension of a term. Thus, a precise definition of the term begins with a complete understanding of the concept. Māris Baltiņš (in Veis-
bergs, 2013, p. 416) adds that context is of importance, that is, whether the definition is used in a subject field dictionary, a common or explanatory dictionary, a legislative act, a textbook, or another type of resource. One of the most frequently discussed issues regarding terminology is their synonymy, which complicates the translation process. Cabré (1992, pp. 109–110) explains that synonyms of the same concept are not necessarily absolutely equivalent words but rather reflect possible variations of the concept: key elements of the concept are present in the synonyms but differ in specific nuances. There are many occasions when two synonymous units belong to two different levels of the same language, but a specialised dictionary usually does not include such cases. This is typically seen “between a scientific name and its popular name; [...] between a standard form and dialectal forms” (ibid., p. 110). In reality, the translator is often confronted with two problems: the uncertainty as to whether the user of the language is denoting the same concept as the translator, and the choice between reflecting the concept in the target language as the officially approved term or trying to find a similar equivalent for the unofficial term.

Currently, English is a lingua franca in scientific communication, and the usage of it has increased rapidly in recent decades also in Latvia. Misunderstandings and difficulties occur when the semantics of the new term is not clarified, its essence and usage are not strictly defined, and the English term is just aligned with the literally corresponding word in Latvian (Skujina & Ilziņa, 2005, p. 137). Environmental science disciplines involve complex and everchanging natural systems, the diversity of which cannot always be reflected in the process of contrasting terminology crosslinguistically.

Environmental Terminology in Latvian

When discussing environmental terms in Latvian, it was found that the theoretical underdevelopment of the field itself and the uncertainty of its boundaries make the systematic development of environmental terminology difficult (Skujina, p. 2004). This study analyses the Latvian term purvs as an environmental term. The Zinātnes un tehnoloģijas vārdnīca (Dictionary of Science and Technology) views the ‘environment’ as a biological term and describes it as a set of circumstances under which biota exist (Zinātnes un tehnoloģijas vārdnīca, 2001, p. 719). Although environmental sciences are considered interdisciplinary and closely related to other fields, moreover, the application of their terms is rather broad, ‘environment’ as an entry does not appear in the etymological dictionary of Konstantins Karulis (1992).

Diāna Rumpīte and Elīna Dāce (2011, p. 283) clarify that the origins of the environmental sector in Latvia date back to the 1960s, and around 1980, it emerged as a separate scientific discipline in relation to nature conservation, but in 1998, the Latvian Science Council recognised environmental science as a new independent field of science, and it has certainly become more topical in recent decades. This is evident in the division of environmental science into research subsectors: (1) environmental engineering, (2) environmental chemistry and ecotoxicology, (3) nature conservation, (4) environmental management (ibid., p. 285) – areas that need to be considered and coordinated in the process of developing environmental science terminology, which has been significantly improved by the political processes of the country: the restoration of independence and the accession to the European Union, in the framework of which environmental protection legislation is being drafted and active translation of regulations and directives is underway (Kalnīņa, 2013, p. 65). However, poor translation skills and lack of terminological coordination in the past may result in imprecise terminology.

In 2007, the Latvian Translation and Terminology Centre conducted research on the quality and accessibility of terminology resources and concluded that eight collections of environmental science terms were issued between 1974 and 2004, and only two of them include a combination of Latvian and English: The Environmental Dictionary (EnDic, 2004), a nine-language dictionary published in Helsinki, which contains 6000 terms, and the Vides zinības: angļu-latviešu skaidrojošā vārdnīca (Environmental Sciences: English-Latvian explanatory dictionary) published in Riga in 2000, which contains 500 of the most common environmental terms (Vides zinības: angļu-latviešu skaidrojošā vārdnīca, 2000). Although translations of environmental terms can be found on certain websites, for instance, the Latvian National Terminology Portal (LNTP) has a collection of environmental science terms, Rumpite and Dāce (2011, p. 283) highlights a significant issue: so far no two-way dictionary of environmental terms in Latvian-English and English-Latvian has been created. Internet resources often contain
multiple translations of different terms, which raises questions about the reliability of these sources. This is particularly important in the field of environmental engineering, which is constantly evolving and requires new terms and translations. Marina Platonova (2011, p. 5) indicates that a large number of dictionaries of environmental and ecological terms published in Latvian were issued in the 1970s and 1980s, resulting in Latvian terms influenced by Russian, while more recent English-Latvian dictionaries published in the late twentieth and early twenty-first century cover other environment-related subsectors.

Valentina Skujina (2004) names the shortcomings of the environmental terminology: it is not well developed and there are no strict boundaries – on the one hand, the environmental sector is treated as a separate science, but on the other hand, it shares common elements with biology, geography, forest science, and engineering. Daina Nitiņa et al. (2008, p. 157) add that the progress of science and technology is creating a greater need for international unity, which can be reached by studying the concepts and terms of science and technology. However, this requires a comprehensive classification system that reflects their mutual arrangement. In 2004, the Terminology Commission of the Latvian Academy of Sciences decided to undertake a systematic development of terminology in the environmental sector, starting with the comprehension and specification of basic terms in this field (Skujīna, 2004).

**Environmental Sector Terminology in English**

In English, the word ‘environment’ was first recorded around 1600 with the meaning ‘state of being environed’ (Harper, n. d.). Around 1828 in Scotland, while translating Goethe’s work, Thomas Carlyle encountered the word *Umgebung*, and began to use it with the meaning ‘the set of circumstances in which a person or thing exists’. In 1942, Spitzer argued that Carlyle’s translation did not reflect the broader meaning of ‘environment’ (Jessep, 2012), which varies according to the context in which it is used. In the *Dictionary of Environment & Ecology* (DOEE, 2004, p. 74), the ‘environment’ is defined as ‘the surroundings of any organism, including the physical world and other organisms’, for example, the environment of both humans and plants can be the natural world or a man-made environment, the environment of microorganisms is the host body, etc. The holistic view of the concept of ‘environment’ suggests that even at a scientific level, it is considered in the context of several interdisciplinary fields, each with its requirements to define and name the concept.

With a special meaning in the ecological field, the word ‘environment’ was first recorded in 1956 (Harper, n. d.). The DOEE (2004, p. 143) expands on the concept of environment, but in the scope of this study, the term ‘environment’ refers to the natural environment or habitat: “an area of land or water where the majority of species are native and there has been very little human activity”. The environmental movement of the 1960s and 1970s in the US greatly contributed to the development of environmental terminology. The US National Environmental Policy Act (NEPA), adopted by President Richard Nixon in 1969, was one of the first laws to establish a broad framework for environmental protection throughout the country, which resulted in active documentation under NEPA and the development of more precise environmental terminology.

Compared to the situation in Latvian, there are numerous explanatory dictionaries of environmental and ecological terms in English, as well as translating dictionaries containing environmental terms. Several of them are published by Oxford University Press and are relevant for wetlands: *A Dictionary of Environment and Conservation* (2017), *A Dictionary of Agriculture and Land Management* (2019), *A Dictionary of Plant Sciences* (2019), and *A Dictionary of Ecology* (2015), which has been issued in five volumes. The latest volume contains 6500 terms and includes entries on all aspects of ecology and the related disciplines of environmental science. The large number of English dictionaries may indicate that terminology is more intensively collected in English than in Latvian.

English as a lingua franca is used on a scientific level worldwide, and it is often perceived that there is no language barrier in scientific communication anymore. Tatsuya Amano et al. (2016) has studied scientific articles on biodiversity conservation published in 2014 in sixteen languages on Google Scholar and discovered that the majority of articles were published in English. However, the opposite trend was also observed: authors nowadays predominantly submit scientific publications in English, while 35.6% of the 75 513 articles collected for the study are not even available in English. This suggests that the prevalence of English in scientific communication makes it impossible to access information for non-English speakers, and research on biodiversity in other languages is
only available in a limited field of information. As a result, the development of scientific terminology in different languages is not sufficient, and knowledge is not exchanged and used in practice.

As early as 1928, Charles Fitzhugh Talman addressed the limitations of environmental terminology, pointing out that when one starts writing about permanently wet but not completely submerged land, they encounter the problem of what to call it. David Moss (1980, p. 215) also highlights the shortcomings of wetland terminology and explains that the nomenclature used to refer to inland and riparian wetlands is used rather superficially in comparison to the binominal nomenclature used to denote flora and fauna. In the nineteenth century, wetlands were viewed as areas that needed to be drained for agricultural use; therefore, the definition of wetlands was irrelevant. According to William J. Mitsch and James G. Gosselink (2015, pp. 27–28), the word ‘wetland’ was not commonly used until the mid-twentieth century, and one of the first references to the word is published in the *Wetlands of the United States* (Shaw & Fredine, 1956). The ecological value of wetlands in the US has become relevant since 1970, but until the demand for listing and documenting wetlands was announced, there was little interest in defining them (Mitsch & Gosselink, 2015, p. 28). Precise definitions in the environmental context are also necessary for developing classification systems, where the complexity of nature is revealed when trying to apply a simple and comprehensive classification system regionally.

**Comparison of Latvian and the US Wetland Habitat Classifications**

Eurasia and North America includes a wide variety of wetland areas that cannot be fully covered in this study, and for this reason, only the names of the wetlands found in Latvia and the US are studied. From a linguistic point of view, habitat names can also be considered as terms – they belong to environmental terminology. The term ‘habitat’ comes from the Greek *bios* (life) and *topos* (place), and is used to denominate a patch of the Earth’s surface covered by a biocenosis under relatively uniform conditions (Zinātnes un tehhnoloģijas vārdnīca, 2001, p. 105).

In the Latvian context, wetlands are understood as defined in the *Ramsar Convention*: “areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters” (Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat, 1971). Therefore, bogs, mires, and fens fall under the broad concept of wetlands. The US Fish and Wildlife Service has used the definition of wetlands proposed by Lewis M. Cowardin (in Tiner, 2017, p. 6) for almost 40 years: “wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.” It can be concluded that the definition of wetlands for Latvia mentions specified wetland habitats and peat as a defining factor, while the US definition of wetlands provides a more superficial explanation, focusing more on water-covered areas.

Paul A. Keddy (2010, p. 5) proposes a list of the world’s largest wetlands (see **Table 1**) that focuses mainly on wetland location and hydrology, based on which four major types of wetlands in English are distinguished specific to North America: swamps, marshes, fens, and bogs.

**Table 1.** The world’s largest wetlands (Keddy, 2010, 5)

<table>
<thead>
<tr>
<th>Continent</th>
<th>Wetland</th>
<th>Description</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Eurasia</td>
<td>West Siberian Lowland</td>
<td>Bogs, mires, fens</td>
<td>2 745 000</td>
</tr>
<tr>
<td>2 South America</td>
<td>Amazon River basin</td>
<td>Floodplain forest, savanna, marshes, mangal</td>
<td>1 738 000</td>
</tr>
<tr>
<td>3 North America</td>
<td>Hudson Bay Lowland</td>
<td>Bogs, fens, swamps, marshes</td>
<td>374 000</td>
</tr>
<tr>
<td>4 Africa</td>
<td>Congo River basin</td>
<td>Swamps, riverine forest, wet prairie</td>
<td>189 000</td>
</tr>
<tr>
<td>5 North America</td>
<td>Mackenzie River basin</td>
<td>Bogs, fens, swamps, marshes</td>
<td>166 000</td>
</tr>
</tbody>
</table>
According to Laimdota Kalniņa (2023), in Latvia peat-accumulating wetlands usually evolve in three stages during which peat accumulates, and depending on the plant composition, mineral content, vegetation, and feeding pattern, the simple division is as follows: raised bogs, transition mires, and fens. Although this classification is considered the determining one, Vija Znotiņa (2014) explains that there are more detailed classifications of Latvian wetlands in which additional characteristics are included. As Raymundo E. Russo (2008, p. 17) explains, a single comprehensive definition of wetlands has not yet been established because of the diversity of water-dependent habitats, including those that are permanent and those that change seasonally. Institutions involved in wetland management have their own requirements for defining wetlands, depending on the functions they perform. The definitions and classification schemes for wetlands in Latvia and the US vary depending on the context in which they are used: for performers of economic activity, it is enough to have a simplified division of wetlands and the names of basic concepts, while ecologists need more detailed terminology. For these reasons, multiple definitions and classification systems for wetlands have been drafted around the world. The lack of a unified classification system means that there is no unified terminology between the environmental sector and the fields of economic activity.

The Semantic Field of the Word Purvs: a Comparative Aspect in Latvian and English

The semantic field of the Latvian word purvs is discussed below, which in this study is interpreted as a set of linguistic resources reflecting a scope of reality and linked by a semantic element (VPSV, 2007, p. 349). The Latviešu valodas vārdnīca (Latvian Language Dictionary) as an explanatory dictionary describes purvs as a low, wet, sloughy place with a peaty surface (Latviešu valodas vārdnīca, 2006, p. 891). For methodological reasons, definitions of the word purvs provided by terminological dictionaries differ, for instance, Zinātnes un tehnoloģijas vārdnīca (2001, p. 545) describes purvs as an excessively wet area of the Earth’s surface which, under conditions of permanent or prolonged periodical wetness, has developed a peat layer with a thickness of at least 30 cm and peatland vegetation. It can be concluded that the definitions of the concept of purvs, both in the context of common language and by an environmental specialist, describe it as a low and wet place where peat is found.

In the Latvian Language Dictionary by Kārlis Milenbahs and Jānis Endzelīns (1927–1929, p. 421) the word purvs is included as the designation of the concept, which is still widely used today without the diacritic mark and has been included even in earlier dictionaries, where different forms of the word can be found. Both Jacob Lange’s Lettisch-deutsches Lexikon (1773) and Kārlis Kristiāns Ulmanis’ Lettisch-deutsches Wörterbuch (1872) refer to it as purvis. The Gotthard Friedrich Stenders’ Dictionary of the Latvian Language Lettisches Lexicon (1789) gives the term in the feminine form – purve. Kārlis Linjuš (in Milenbahs & Endzelīns, 1927–1929, p. 421), on the other hand, uses a different form of the word – puveļīs, while the sixth volume of the Filologu biedrības raksti (Philological Society’s Proceedings) (1926) documents puveļis. Therefore, the root purv- has been used in various variations of the word purvs. Konstantīns Kurulis (2001, p. 726), while discussing the etymology of the word purvs, points out that it is a borrowed word, but the origin of the word is unclear.

The Latviešu valodas sinonīmu vārdnīca (Latvian Dictionary of Synonyms) contains a considerable number of synonyms for the word purvs: “purvājs, purvaine, purviene, purveklis, dumbrs, dumbrājs, dūks, dūksna, dukstaļs, dukstaļs, pope, popenis, popiene, popiens, klāns, tirelis” (Latviešu valodas sinonīmu vārdnīca, 2002); which demonstrates a deep understanding of nature and underlines the need to express the uniqueness of wetland habitats in the language. Sanda Rapa (2014, p. 116) mentions that there are 155 lexemes recorded in the nomenclature of the concept of purvs. Ritva Lisa Pitkänen (1998, p. 279) associates the various names of the wetlands with extra-linguistic factors – they were necessary for crop farmers for their agricultural activities. Most of the synonyms for bogs, mires, and fens refer to their main characteristic – wetness and quagginess.

When referring to ‘fen’, Agnese Priede uses its synonymous form ‘minerotrophic fen’, which is a fen or transition mire that receives nutrients from groundwater (Priede, 2017, p. 251). A transition mire is a type of minerotrophic mire in which the role of groundwater in nourishing the mire is becoming less important and the role of atmospheric precipitation is becoming more important. Both excessively wet, acidic, dystrophic species of natural sites and richer species of natural sites (various sedges, cottongrass, Sphagnum moss layer) can be found. Thus the two descriptions above indicate that the development process of bogs, mires, and fens can be divided into phases. A raised bog is an ecosystem that is nourished by rainfall and dominated by Sphagnum moss as the
main former of the peat. Raised bogs develop from fens and are regarded as the final stage of succession. They are characterised by a dome-shaped form and may have one or more domes (Priede, 2017, p. 248).

Examining the definitions, it is evident that they are based mainly on how bogs, mires, and fens receive nutrients and that in Latvian the particular habitat names are expressed by the subordinate word-groups: raised bog, transition mire, and fen. In Latvian, the need to include features from both a superordinate concept and a subordinate concept in the term has been fulfilled: purvs as a superordinate concept and its subordinated words: augstais (raised), pārejas (transition) and zemais (low). In a sense of a term, the word purvs is used as an independent term or as a part of a terminological subordinate word-group, placed at the end of it.

The search for equivalents of the Latvian word purvs in English is more complicated, as there are several English translations for purvs given by Jānis Dolacis (1998): bog, marsh, swamp, morass. After checking the explanations of ‘bog’, ‘fen’, ‘marsh’, ‘mire’, and ‘swamp’ in English provided by the Cambridge Online Dictionary (CD, n.d.), it can be concluded that their meanings are similar:

- **bog** – “soft, wet ground, or an area of this”;
- **fen** – “an area of low, flat, wet land in England”;
- **marsh** – “ground near a lake, a river, or the sea that often floods and is always wet”;
- **mire** – “an area of deep, wet, sticky earth”;
- **swamp** – “(an area of) very wet, soft land” (CD).

The explanatory dictionary does not provide information, on whether these terms are equal in meaning, so it is also necessary to examine them in the context of terminology and clarify their etymology. The Oxford Concise Dictionary of English Etymology explains that the origins of ‘bog’ are attested in Gaelic and Irish bogach, which means ‘soft’ (OCEE, 1986, p. 45). The word ‘bog’ has been used as a noun since the fourteenth century and as a verb since 1599, most commonly in the phrase ‘to bog down’ meaning “to cause (something) to sink in wet ground” (Merriam-Webster, n.d.). DOEE (2004, p. 24) defines ‘bog’ as “soft wet land, usually with moss growing on it, which does not decompose but forms a thick layer of acid peat”. Examples of ‘bog’ can be found in northern Europe and central Russia (Keddy, 2010, p. 8). Because this type of wetland is characterised by mosses and peat and is widespread in the Northern Hemisphere, the concept of ‘bog’ also applies to Latvian wetlands.

‘Fen’ was first recorded before the twelfth century and its origin is explained by Old English fenn, it is related to Old High German fenna meaning ‘marsh’ and Sanskrit paṭika meaning ‘mud’, and The New English Dictionary on Historical Principles gives the Old English meaning of ‘fenny’ as ‘dirty’ (NOED, 1993, p. 934). Keddy (2010, p. 8) explains that in scientific terms, ‘fen’ refers to “a wetland that is usually dominated by sedges and grasses rooted in shallow peat, often with considerable groundwater movement and with pH greater than 6”. Fens can be found in northern Canada and Russia and smaller areas throughout the temperate zone. DOEE (2004, p. 84) defines ‘fen’ as “an area of flat marshy land, with plants such as reeds and mosses growing in alkaline water”.

‘Marsh’ was first used as a noun before the twelfth century, and its origins are traced to Middle English mersh, Old English merisc, mersc, Middle Dutch mersch, and Old English merely meaning ‘sea’ (Merriam-Webster, n.d.). Keddy (2010, p. 5) defines ‘marsh’ as “a wetland that is dominated by herbaceous plants that are usually emergent through water and rooted in hydric soils but not in peat. Examples would include cattail marshes (Typha angustifolia) around the Great Lakes and reed beds (Phragmites australis) around the Baltic Sea”. The Oxford Learner’s Thesaurus adds to the explanation of ‘marsh’ the fact that it is impossible for water to flow away from the area (OLT, 2008, p. 476). It can be concluded that marsh-type wetlands are formed near bodies of water and therefore are characterised by higher humidity than bog-type wetlands.

The word ‘mire’ was first used as a noun in the fourteenth century, but as a verb meaning ‘to get stuck in a mire or to get stuck as in a mire,’ it has been used since the fifteenth century. The origin of ‘mire’ is traced to Middle English, Old Norse myr, and Old English mōs, which means ‘bog, marsh’. Eeva-Liisa Hallanaro et al. (2001, p. 224) traces the origin of the ‘mire’ to the Old Norse word myr. In English ‘mire’ is now mainly used in scientific communication to refer to any waterlogged habitat in which peat has accumulated as a result of waterlogging. Mitsch & Gosselink (2015, p. 714) defines ‘mire’ as a word used in the European context: “Synonymous with any peat-accumulating wetland”, suggesting that the concept of ‘mire’ is relevant to the natural conditions of Latvia.
The first use of ‘swamp’ as a noun was in 1624, and as a verb ‘to swamp’, meaning ‘to flood, sink in’ it was used in 1784 (Merriam-Webster, n.d.). In the seventeenth century, the word ‘swamp’ was also recorded as ‘low, wet land’ and in the eighteenth century as ‘depression’ (OCEE, 1986, p. 476). Keddy (2010, 5) refers to a swamp as “a wetland that is dominated by trees that are rooted in hydric soils but not in peat. Examples would include the tropical mangrove swamps (mangal) of Bangladesh and bottomland forests in floodplains of the Mississippi River valley in the United States”. Mitsch & Gosselink (2015, p. 718) offers definitions of a swamp in both the US meaning: “wetland dominated by trees or shrubs”; and the European meaning: “forested fens and wetlands dominated by reed grass (Phragmites)”. However, EnDic does not include ‘swamp’ as a wetland habitat but includes the terms ‘swampiness’ and ‘swamp forest’.

‘Wetlands’ is a word that can be used to generalise a wet, marshy place in nature if it is not clear what to call it, but it is a rather broad term. Before the nineteenth century, the words ‘swamp’, ‘marsh’, ‘bog’, ‘fen’, ‘mire’, and ‘moor’ were used to name wetlands, often without much attention to precision, as the word ‘wetland’ was not yet widely used (Mitsch & Gosselink, 2015, p. 27–28). There are numerous words created for wetlands in English and they vary between different regions of the world, both in common language and at a scientific level, but this work focuses in particular on wetland names used in helonyms. In this study, the term ‘helonym’ describes a place name that denotes swamp, bog, marsh, mire or fen (VPSV, 2007, p. 139).

### Theoretical and Methodological Background

The method of data collection used in the study is excerption: theoretical materials on terms and terminology and the history and problems of the environmental sector in Latvian and English are excerpted from translation science and terminology research sources and publications on the environmental sector, while the translation units (helonyms) for analysis are excerpted from tourism websites. The official helonyms are excerpted from websites of the US Environmental Protection Agency (EPA) and the Nature Conservation Agency (Dabas aizsardzības pārvalde, n.d.) of Latvia, and in some cases also from environmental sector texts. The methods of data analysis used in the study are contrastive and qualitative methods, which compare terms in both languages and, based on the theoretical information gathered, draw conclusions about the relevance of the translation units in each of the languages under analysis.

### Results and Discussion

#### The Equivalent of the Word Purvs in Translations of Latvian Helonyms into English

The following section will describe the translations of the excerpted Latvian helonyms into English. *Raganu purvs* (see Table 2) is an unusual habitat – it is classified as a raised bog but also includes areas of calcareous fens, transition mires, and spring fens (Kemēru Nacionālais parks). The Latvian equivalent of ‘raised bog’ is *augstais purvs*, and synonyms for the term include ‘high moor’ and *sūnu purvs* (EnDic). In both the common translation dictionary Angļu-latviešu vārdnīca (ALV, 2007, p. 123) and the Politehnikā vārdnīca (Polytechnical dictionary, PV) ‘bog’ is given as *purvs*, *muklājs* (PV, 1999, p. 85). Jānis Dolacis (1998, p. 182) gives ‘marsh’, ‘bog’, and ‘swamp’ as equivalents to *muklājs*, even more equivalents are included on LNTP – ‘bog’, ‘swamp’, ‘marsh’, and ‘mire’. The EnDic lists *muklājs* and *slīkšņa* as colloquial words and offers *staignājs* as the term instead of both. ‘Mire’ is a part of the subordinate word-group ‘transition mire’, and EnDic gives *purvs* as the only equivalent for ‘mire’. The EU Terminology Database – Interactive Terminology for Europa (IATE, Translation Centre for the Bodies of the European Union, n.d.) offers *muklājs* as the equivalent of ‘mire’, but LNTP gives both *muklājs* and *dumbrājs*, which leads to confusion about the concepts of *dumbrājs* and *muklājs*. Another translation of ‘mire’ is given by PV (1999, p. 513) – ‘mud, to smear with mud’. The inconsistency in the English translations of the helonym *Raganu purvs* shows that wetland terminology is not consistent.

<table>
<thead>
<tr>
<th>Table 2. Raganu purvs</th>
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<tbody>
<tr>
<td><strong>Latvian</strong></td>
</tr>
<tr>
<td>Raganu purvs</td>
</tr>
<tr>
<td>(Dabas aizsardzības pārvalde, n.d.)</td>
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</tbody>
</table>
*Platenes purvs* (see Table 3) is a typical fen according to the classification of wetland habitats, more precisely – a calcareous fen, but on the website *Celošajš.sv*, it is described as ‘a chalky fen bog’, which is an incomprehensible combination of words. In addition, ‘bog’ designates a habitat of raised bogs, while ‘mire’ is used to denote a transitional mire. On LNTP, the translations for ‘fen’ are listed as *dumbrājs*, *zemais purvs*, and *zāļu purvs*, but IATE lists *dumbrājs* as the only equivalent for ‘fen’. The *EnDic* dictionary gives the following equivalents for ‘fen’: ‘minerotrophic fen’, *zemais purvs*, and *fēns*, which is more like a regionalism. It can be concluded that the lack of a match for the word *purvs* in translating more detailed names of wetland habitats into English is even more problematic.

### Table 3. *Platenes purvs*

<table>
<thead>
<tr>
<th>Latvian</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Platenes purvs</em> (Dabas aizsardzības pārvalde, n.d.)</td>
<td>Platene Bog (Lauku celotājs, n.d.)</td>
</tr>
<tr>
<td><em>Platenes purvs</em></td>
<td>Platene Mire (Bambe, 2008, p. 163)</td>
</tr>
</tbody>
</table>

The Equivalent of the Word *Purvs* in Translations of the US Helonyms into Latvian

The Latvian translations of the English helonyms are described below. Manchac Swamp (see Table 4) is a wetland in the southern US state of Louisiana characterised by swamp-type wetlands. This type of wetland does not have a specific meaning in Latvian and is most often translated by the superordinate concept *purvs*, but some terminology sources include *muklājs* (Dolacis, 1998, p. 182), *dumbrājs* (Kalniņa, 1998, p. 147), *staignājs* (ibid., p. 346), and *purvājs* (ibid., p. 218). As the term *muklājs* is not defined in the terminological sources but in the *Angļu-latviešu vārdnīca* (2007) is translated as ‘bog’ (ibid., p. 123), ‘quagmire’ (ibid., p. 816), and ‘slough’ (ibid., p. 945), the helonym ‘Manchac Swamp’ should be translated into Latvian using the superordinate concept *purvs*. In this case, it is difficult to reflect the type of wetland habitat due to a lack of linguistic resources, and it should be noted this is a very complicated task for machine translation tools as it is seen in the example with Manchac swamp on the website *Actulidad Viajes*. The situation can be addressed by adding more information and explaining that these wetlands are specific to the southern US. The translation of swamp-type helonyms proves that there are terminological ambiguities concerning the word ‘swamp’, which can be resolved in several ways: using ‘swamp’ as a regionalism, creating a new word or using an existing synonym, which would mean that the concept should be accurately reflected in the definition to avoid misunderstandings. Based on the list proposed by Keddy (see Table 1), it can be concluded that this type of wetland is not found in Latvia, and ‘swamp’ is also not included in the *Environmental Terminology* (ET, 2004).

According to Keddy (see Table 1), marsh habitats are also not typical for Eurasia, so this concept does not apply to Latvian wetlands, and the search for a terminological match for ‘marsh’ could be problematic, as is the case with the translation of the helonym ‘Suisun Marsh’ (see Table 5), which is the largest brackish marsh on the west coast of North America. The meanings given by LNTP are the same as for ‘swamp’, which could be explained by the ambiguous definitions of ‘marsh’ and ‘swamp’ dating back to the history of the US environmental sector. *Angļu-latviešu vārdnīca* (2007, p. 633) also mentions *dumbrājs* as a translation of ‘marsh’, which does not correspond to the conditions of a marsh habitat, as trees grow in *dumbrājs* habitats, while herbaceous plants grow in marsh-type wetlands. In *EnDic* ‘marsh’ is not included, again indicating that the concept is not applicable to Eurasian wetland habitats. The example in Table 5 shows that the helonym ‘Suisun Marsh’ is translated

### Table 4. Manchac Swamp

<table>
<thead>
<tr>
<th>English</th>
<th>Latvian</th>
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</thead>
</table>

### Table 5. Suisun Marsh

<table>
<thead>
<tr>
<th>English</th>
<th>Latvian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suisun Marsh (EPA, n.d.)</td>
<td><em>Suisun purvs</em> (World Tourism Group, n.d.)</td>
</tr>
</tbody>
</table>
Because the natural environment varies worldwide, a wetland habitat characteristic for one region may not be found in another country, and the concept may not be given an appropriate designation in a given language because it is irrelevant to language users. Currently, there is no comprehensive wetland classification system that encompasses all the world’s wetlands, so the correspondence of their names in the environmental terminology of each language is often unclear.

The results of this study suggest that the lack of a single-standardisation approach for helonyms poses difficulties to translators. Exploring translations of 16 Latvian helonyms on tourism websites in English reveals that the word *purvs* has been translated in different ways: *bog*, *fen*, *marsh*, *mire*, and *swamp*. To translate a Latvian helonym into English, it is first necessary to clarify the wetland habitat in question. After exploring translations of five US helonyms on tourism websites in Latvian, it can be concluded that when translating a helonym from English into Latvian, it is not necessary to name the wetland habitat in question with terminological precision, but it is sufficient to use the superordinate concept *purvs*. In Latvian, when referring to a ‘*bog*’, ‘*mire*’ or ‘*fen*’ in a non-scientific way, any type of it can be named using the same lexical unit – *purvs*, while in English, the speaker refers to a specific type of wetland – ‘*bog*’, ‘*fen*’, ‘*marsh*’ or ‘*swamp*’ – even when using the non-scientific language. In Latvian helonyms, the habitat of the wetland is rarely reflected, while English helonyms already indicate a specific type of wetland.

There is a wide range of synonyms for the word *purvs* in Latvian, but their explanations do not provide a deeper understanding of the type or peculiarity of the habitat and are most often limited to the simplistic description ‘*soft, wet ground*’, giving readers a wide opportunity to create their interpretation of the wetland habitat. To correctly use the terms, it is necessary to understand their meaning and have precise definitions that describe the specific type of wetland, which is closely related to their vegetation and hydrology. Further research would require an in-depth study of the meanings of the word *purvs* synonyms in Latvian, as well as a study of English language usage regarding words ‘*bog*’, ‘*fen*’, ‘*marsh*’, ‘*mire*’, and ‘*swamp*’ in daily communication practice.

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**References**


Sources


Santrauka

Linda Ozola-Ozoliņa, Silga Sviķe

Aplinkos srities termins „purvs“ latvių kalboje: Helonimų vertimo iš latvių kalbos į anglų kalbą ir atvirkščiai problemos ir sprendimai

Versdamas helonimus iš latvių kalbos į anglų kalbą, vertėjas susiduria su keliais latviško termino purvs (liet. pelkė) sąvokos sinonimais: bog, fen, marsh, mire ir swamp, kurie įvairiškai tikslių pelkės biotopo tipą. Kadangi skirtinėose pasaulio vietose gamta yra skirtinga, vienos pelkės biotopo kitoje šalyje gali ir nebūti, o atitinkama sąvoka kitos kalbos terminologijoje gali būti neaktuali. Nėra vienos bendros, visus pasaulio šlapžemes jungiančios klasifikacijos sistemos, todėl jų pavadinimų atitikties kiekvienos kalbos aplinkos srities terminologijoje dažnai būna neužtikrintos. Tyrimo tikslas – išsiaiškinti, ar vartojamo aplinkos srities termino purvs latviškų helonimų vertimai į anglų kalbą ir amerikietiškų helonimų vertimai į latvių kalbą yra tikslūs ir nuoseklūs.


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