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The Inland Cladocera and Copepoda Fauna in Greece

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Abstract: Greece is situated in the East Mediterranean region and in the Balkan peninsula, i.e., a European biodiversity hotspot with high endemism in subterranean and freshwater fauna, highlighting the need to understand its biodiversity. A literature search was undertaken to present a checklist of cladocerans and copepods based on a compilation of published and current data, from 1892 up to 2022 from inland surfaces and subterranean water bodies from different regions of Greece. For Cladocera, 80 species were recorded (9 families with 35 genera). The most diverse families were Chydoridae (20 genera with 33 species) and Daphniidae (5 genera with 27 species). For copepoda, 134 taxa were recorded, in surface water bodies (12 families with 34 genera), subterranean water bodies (7 families with 27 genera), and parasitic copepods (3 families with 3 genera). The most diverse families in surface waters were Cyclopidae (15 genera with 41 taxa) and Diaptomidae (5 genera with 17 species), while those in subterranean waters were Cyclopidae (11 genera with 35 taxa) and Canthocamptidae (6 genera with 17 taxa). More species are expected to be discovered after sampling understudied regions, especially islands, as well as water bodies such as temporary pools, swamps, ditches, puddles, and the littoral parts of lakes, while molecular studies are needed to clarify various cases of complex taxonomy.

Keywords: diversity; cladocerans; copepods; subterranean copepods; taxonomy

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1. Introduction

Studies on the zooplankton community in Greece date back to the end of the 19th century [1,2] and a checklist of the rotifer community has recently been published in order to provide a baseline for future studies [3]. The first published studies concerning the zooplankton community (by Richard in 1892 and 1897) regarded copepods and cladocerans, and even included the first description of a new species, i.e., *Arctodiaptomus steindachneri* [2]. Several other publications sporadically followed, providing information for several lakes [4] and island areas (Kiefer 1928; 1938; Brian 1929; Chappuis 1929 from Zarfdjian and Economidis [5] and references therein [6]). In the mid-1900s, when zooplankton fauna of Greece was still poorly known, Stephanides [6–9] extensively studied the crustacean fauna of the island Corfu, while Pesce later focused on subterranean copepod fauna from both the islands and the Greek mainland in many publications from 1979 to 1986 [10–17]. More recently, Marrone et al. reported 46 taxa from the island of Crete [18] and 20 taxa from the Fthiotis area [19]. These studies demonstrate that biodiversity patterns can actually reflect the areas where taxonomists live and work, or go on holiday or conduct fieldwork [20–23]. For rotifers, i.e., another group of the zooplankton community, Fontaneto et al. [22] coined the term 'rotiferologist effect'. In analogue, we could use the terms 'copepodologist effect' or/and the 'effect of the cladoceran specialist', which were identified in previous years in Greece. All these could improve the faunistic knowledge of a specific area and misleadingly identify low biodiversity in another underexplored area.

Furthermore, regional species diversity should be considered in a historical context, reflecting the taxonomic resolution that can vary with time [24]. Following the 'specialist effect', European experts identified European-like species from all over the world, 'creating' cosmopolitan species that were later identified to be species complexes [24]. Thus, reliable

data on the distribution of all existing species are needed to understand diversity, biogeography, and ecosystem processes, as well as provide the base for future studies. The global revision of taxonomy should be conducted in close coordination with phylogenetic studies, including the modern approach of integrative taxonomy, combining morphology, ecology, and molecular analysis, which currently aim to achieve a complete biodiversity record of all species [25].

Cladocera are important components of freshwater ecosystems; they hold a keystone position in ecosystem functioning and are critical for management and restoration plans. They are mainly members of the zooplankton community of surface freshwaters with currently recognized 620–650 species, although the actual diversity is estimated to be 2–4 times higher [26]. There are many cases of extensive phenotypic plasticity and hybridization that hamper the taxonomic identity of several species that form species complexes.

Copepods can be found in almost all freshwater habitats from moist soils, leafpacks, groundwater, wetlands, and phytotelmata. They comprise a major part of the zooplankton biomass, playing a pivotal role in aquatic food webs, both as primary and secondary consumers, while they also serve as a major part of food for higher trophic levels. Approximately 2814 free-living species reside in freshwaters, but this number is expected to grow as other species complexes are discovered [24]. Furthermore, about 330 species of copepods in freshwaters are parasitic on fish and molluscs, while they also live as commensal epibionts on freshwater invertebrates [24].

An area of great interest regarding its biodiversity is the region of the Mediterranean basin which is regarded as a biodiversity hotspot, although its freshwater fauna is not well studied [27]. Greece, besides belonging to the Mediterranean regions, is also part of the Balkan Peninsula, a European biodiversity hotspot with high endemism in subterranean and freshwater fauna, hosting ancient lakes, thus highlighting the importance of understanding its biodiversity even more. Recently, updated zooplankton checklists (e.g., [3,28–30]) were published across the Balkan Peninsula in order for zooplankton fauna to be used for diversity conservation and ecological studies in light of the global threats faced by aquatic ecosystems. Herein, we present an up-to-date checklist for both cladocerans and copepods based on a compilation of published and current data from 1892 up to 2022.

2. Materials and Methods

Here, we provide data from surface inland water bodies [24 natural lakes, 14 reservoirs, 2 artificial urban ponds, a man-made water channel connecting lakes Mikri Prespa and Megali Prespa, a river (Aliakmon), a wetland (Kalodiki), and various small water bodies from different regions of Greece (Figure 1a)] and subterranean water bodies (e.g., wells, caves) of Greece (Figure 1b). Morphometric characteristics, trophic states, and salinity values for each water body, when available, are presented in Table S1.

The checklist of crustaceans recorded in inland surface or subterranean water bodies from Greece compiled herein was based on already-published data and data in the present study. A bibliographic review of crustaceans' diversity was conducted using the databases Google Scholar and Web of Science, as well as the search words "crustacea", "copepoda", "cladocera", "Greece", and "diversity" during the entire period available in each database (retrieved during May 2022) and the National Archive of PhD Theses of Greece. The grey literature, including bachelor and master theses and technical reports, are also presented. Moreover, historic data from 1892 up to 1987 included in a previous checklist [5], which were not available in the above databases, are cited as Zarfdjian and Economidis [5] in Table S1. Studies with only genus-level identifications were not included in our dataset. The list of consulted works per water body/region is available in Table S1.

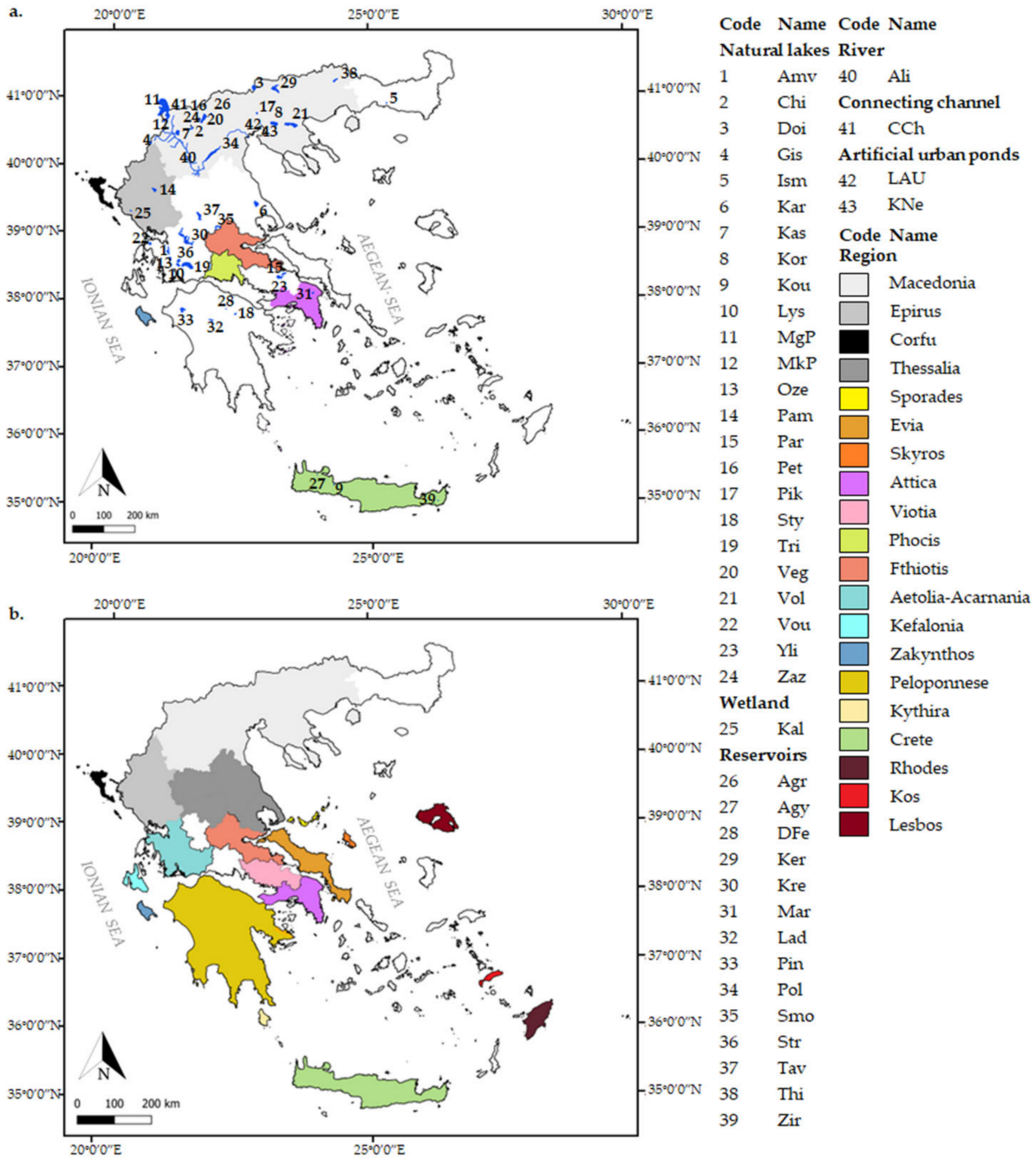

Figure 1. Map of Greece showing (**a**) the locations of the surface water bodies and (**b**) the locations of the subterranean water bodies included in the study. Abbreviations: Amv: Amvrakia, Chi: Chimaditida, Doi: Doirani, Gis: Gistova, Ism: Ismarida, Kar: Karla, Kas: Kastoria, Kor: Koronia, Kou: Kournas, Lys: Lysimaxeia, MgP: Megali Prespa, MkP: Mikri Prespa, Oze: Ozeros, Pam: Pamvotis, Par: Paralimni, Pet: Petron, Pik: Pikrolimni, Sty: Stymfalia, Tri: Trichonis, Veg: Vegoritis, Vol: Volvi, Vou: Voulkaria, Yli: Yliki, Zaz: Zazari, Kal: Kalodiki, Agr: Agra, Agy: Agya, DFe: Doxa-Feneou, Ker: Kerkini, Kre: Kremasta, Mar: Marathona, Lad: Ladona, Pin: Pineiou, Pol: Polyfytos, Smo: Smokovo, Str: Stratos, Tav: Tavropou, This: Thisavros, Zir: Zirou, Ali: Aliakmon, CCh: connecting channel (between Megali and Mikri Prespa), KNe: Kipos nerou pond, LAU: Limnoula auth. Skyros is an island of the Sporades archipelago which is indicated separately due to the number of species recorded there for the first time.

Data were sorted into an Excel file according to the inland surface water body (Table S2 for cladocerans and Table S3 for copepods) and the region for subterranean water bodies

(Table S4). Currently valid species names, authorships, synonyms, and spellings were verified and updated using the World Register of Marine Species (WoRMS) [31]. When necessary, we checked the species identifications based on available pictures and updated the species identification of genus *Diaphanosoma* based on the literature [32].

For each species, the relative frequency of occurrence (i.e., the number of times a certain species occurred in all examined water bodies) was calculated. The species were then categorized as rare when the frequency of occurrence ranged up to 20%, moderate when the frequency of occurrence ranged between 20% and 50%, and frequent when the frequency of occurrence was greater than 50%. Moreover, a literature review was conducted for cladoceran and copepod's functional traits (Tables S2–S4). The feeding type of Cladocera was subdivided into five classes (B-type for bosminids, C-type for chydorids and macrothricids, D-type for daphnids, S-type for sidids, and I-type for ilyocrypids) based on how they obtain their food [33,34]. The trophic group of Cladocera was divided to filter-feeders (feeding on algae, bacteria, or detritus) and carnivores for the raptorial *Leptodora.* The trophic group of Copepoda was divided into traditional herbivore, omnivore, and carnivore categories, with the addition of an omnivore–herbivore category to distinguish omnivore copepods that are more herbivorous [33]. Furthermore, the habitat preference is mentioned, i.e., littoral or pelagic, based on where each species is most likely to be found [33–35].

3. Results

3.1. Cladocera

The total number of Cladocera species reported from Greece was 80 (Table 1). These species were classified into 1 class (Branchiopoda), 1 superorder (Diplostraca), 3 orders (Anomopoda, Ctenopoda, and Haplopoda), 9 families, and 35 genera (Table 2). The most diverse family was Chydoridae with 20 genera and 33 species, followed by Daphniidae with 5 genera and 27 species (Figure 2). In lakes and reservoirs, for which more extensive data exist, *Bosmina longirostris* and *Daphnia cucullata* had the highest frequencies of occurrence, with 89% and 68%, respectively. All cladocerans were recorded in surface waters, with only two, *Coronatella rectangula* and *Daphnia pulex*, being recorded in subterranean water body wells in Attica [36] and Corfu [7–9], respectively. Although cladocerans are mainly known from surface water bodies, members of the chydorids are known to be accidentally found in wells and caves as well [37,38].

Table 1. A list of cladocera species recorded in the studied water bodies of Greece (abbreviations according to Figure 1), * indicates species also reported from subterranean water bodies.

Species	Region
Acroperus harpae (Baird, 1834)	Ali, Kas, MgP, MkP, and Pam
Alona guttata G.O. Sars, 1862	Ali and Kas
Alona intermedia G.O. Sars, 1862	MkP
Alona quadrangularis (O.F. Müller, 1776)	Chi, Gis, Kas, Veg, Thi, and Corfu
Alona salina Alonso, 1996	Kor and Crete
Alonella excisa (Fischer, 1854)	Kou, Yliki, Crete, Corfu, Attica, Zakynthos, and Epirus
Alonella exigua (Lilljeborg, 1853)	Kou and Crete
Alonella nana (Baird, 1843)	Kou and Corfu
Biapertura affinis (Leydig, 1860)	Ali, Doi, Kou, MkP, Tri, Crete, Corfu, and Epirus
Bosmina (Bosmina) longirostris (O.F. Müller, 1785)	Ali, Amv, Chi, Doi, Ism, Kar, Kas, Kor, Kou, Lys, MgP, MkP, Oze, Pam, Par, Pet, Pik, Sty, Tri, Veg, Vol, Vou, Yli, Zaz, Ker, Kre, Mar, Lad, Pin, Pol, Smo, Str, Tav, Thi, CCh, and Attica
Bosmina (Eubosmina) coregoni Baird, 1857	Kas, MkP, Pet, and Veg
Camptocercus rectirostris Schödler, 1862	Doi, Pam, Tav, Corfu, and Zakynthos
Ceriodaphnia dubia Richard, 1894	Kas and Corfu
Ceriodaphnia laticaudata P.E. Müller, 1867	Pam and Corfu
Ceriodaphnia pulchella G.O. Sars, 1862	Ali, Amv, Doi, Kas, Kor, Lys, MgP, MkP, Oze, Pam, Pet, Sty, Tri, Beg, Vol, Vou, Yli, Ker, Pol, Smo, Str, Thi, CCh, and Attica

Table 1. *Cont.*

Species	Region
Ceriodaphnia quadrangula (O.F. Müller, 1785)	Ali, Doi, Kar, MgP, MkP, Pet, Yli, Zaz, Lad, Pin, and Crete
Ceriodaphnia reticulata (Jurine, 1820)	Yli, Crete, Fthiotis, Corfu, and Attica
Ceriodaphnia setosa Matile, 1890	Chi, Zaz
Chydorus latus G.O. Sars, 1862	MkP
Chydorus ovalis Kurz, 1875	Kor,MgP, and MkP
Chydorus sphaericus (O.F. Müller, 1776)	Ali, Amv, Doi, Gis, Kar, Kor, Kou, MkP, Pam, Pet, Sty, Veg, Vol, Vou, Yli, Dfe, Kre, Mar, CCh, Kal, Crete, Fthiotis, Corfu, Attica, and Zakynthos
Coronatella rectangula (G.O. Sars, 1862) *	Chi, Doi, Ism, Kar, Kas, Kor, MkP, Oze, Pam, Pet, Pik, Sty, Veg, Vol, Vou, Yli, Zaz, Mar, Smo, Tav, Zir, CCh, Kne, LAU, Kal, Crete, Fthiotis, Corfu, Attica, Zakynthos, and Epirus
Daphnia (Ctenodaphnia) atkinsoni Baird, 1859	Lys, Pik, Crete, and Attica
Daphnia (Ctenodaphnia) chevreuxi Richard, 1896	Crete and Fthiotis
Daphnia (Ctenodaphnia) magna Straus, 1820	Chi, Kor, Zaz, and Corfu
Daphnia (Ctenodaphnia) mediterranea Alonso, 1985	Attica
Daphnia (Ctenodaphnia) similis Claus, 1876	Chi, Kor, Macedonia, and Corfu
Daphnia (Daphnia) cucullata G.O. Sars, 1862	Ali, Amv, Doi, Kar, Kas, Kor, MgP, MkP, Oze, Pam, Par, Pet, Tri, Veg, Vol, Vou, Yli, Zaz, Dfe, Ker, Kre, Pin, Pol, Smo, Str, Tav, CCh, and Kal
Daphnia (Daphnia) curvirostris Eylmann, 1887	Chi and Kor
Daphnia (Daphnia) galeata G.O. Sars, 1864	Amv, Chi, Kas, Kor, MkP, Pam, Sty, Tri, Veg, Vol, Yli, Smo, Tav, and Thi
Daphnia (Daphnia) hyalina Leydig, 1860	Amv, Doi, Kas, Kor, MgP, MkP, Pam, Pet, Tri, Veg, Vol, Ker, Smo, and Epirus
Daphnia (Daphnia) longispina (O.F. Müller, 1776)	Chi, Doi, Gis, Kas, Kor, MgP, MkP, Sty, Tri, Vou, Zaz, Ker, Pin, Smo, and Epirus
Daphnia (Daphnia) obtusa Kurz, 1874	Kor and Corfu
Daphnia (Daphnia) parvula Fordyce, 1901	Yli
Daphnia (Daphnia) pulex Leydig, 1860 *	Kor, MkP, Macedonia, Corfu, and Zakynthos
Daphnia (Daphnia) pulicaria Forbes, 1893	Kor, MkP, Macedonia, Corfu, and Zakynthos
Daphnia psittacea Baird, 1850	Macedonia and Corfu
Diaphanosoma macedonicum Korovchinsky and Petkovski, 2014	Doi, MgP, and MkP
Diaphanosoma mongolianum Ueno, 1938	Ali, Kas, Pam, Par, Veg, Vol, Vou, Ker, Kre, and Tav
Diaphanosoma orghidani Negrea, 1982	Amv, Lys, Oze, Par, Tri, Vol, Lad, Str, and Tav
Disparalona leei (Chien Shing-ming, 1970)	Vol
Disparalona rostrata (Koch, 1841)	Doi, Kas, Kor, Pam, Pet, Veg, Yli, Zaz, Mar, Lad, and Attica
Dunhevedia crassa King, 1853	Corfu
Eurycercus lamellatus (O.F. Müller, 1776)	Ali, Doi, and MkP
Graptoleberis testudinaria (Fischer, 1851)	Doi, Kas, MkP, Corfu, and Epirus
Ilyocryptus agilis Kurz, 1878	Doi, Kas, MkP, and Pam
Ilyocryptus sordidus (Liévin, 1848)	Ali, Kas, Kor, Oze, and Vol
Kurzia latissima (Kurz, 1875)	Epirus
Lathonura rectirostris (O.F. Müller, 1785)	Macedonia, Corfu, and Attica
Leptodora kindtii (Focke, 1844)	Doi, Kor, Lys, MgP, MkP, Oze, Pam, Tri, Veg, Vol, Yli, Str, Tav, Thi, and Kal
Leydigia acanthocercoides (Fischer, 1854)	Chi, Doi
Leydigia iberica Kotov and Alonso, 2010	Crete
Leydigia leydigi (Schödler, 1863)	Doi, MkP, Pam, Vol, and Corfu
Macrothrix hirsuticornis Norman and Brady, 1867	Doi, Kor, Pam, Vou, Crete, Fthiotis, Corfu, and Attica
Macrothrix laticornis (Jurine, 1820)	Veg, Vol, and Corfu
Macrothrix rosea (Jurine, 1820)	Corfu
Megafenestra aurita (Fischer, 1849)	Chi, Kor, and Zaz
Moina belli Gurney, 1904	Macedonia and Corfu
Moina brachiata (Jurine, 1820)	Ism, Kas, Kor, Pet, Pik, Vol, Crete, Fthiotis, Macedonia, Corfu, and Attica
Moina dubia Guerne and Richard, 1892	Corfu

Table 1. *Cont.*

Species	Region
Moina macrocopa (Straus, 1820)	Fthiotis
Moina micrura Kurz, 1875	Doi, Kas, Kar, Kor, Lys, Oze, Pam, Pet, Veg, Vou, Yli, Zaz, Crete, Macedonia, and Corfu
Monospilus dispar G.O. Sars, 1862	Yli and Attica
Ovalona anastasia (Sinev, Alonso, Miracle, and Sahuquillo, 2012)	Crete
Ovalona nuragica (Margaritora, 1971)	Crete
Oxyurella tenuicaudis (G.O. Sars, 1862)	Kas and Corfu
Peracantha truncata (O.F. Müller, 1785)	MkP
Picripleuroxus denticulatus (Birge, 1879)	MgP, MkP, and Vol
Picripleuroxus laevis (G.O. Sars, 1862)	Doi, MkP, and Corfu
Pleuroxus aduncus (Jurine, 1820)	Kas and Pam
Pleuroxus trigonellus (O.F. Müller, 1776)	Doi and Pam
Pseudochydorus globosus (Baird, 1843)	Doi
Scapholeberis mucronata (O.F. Müller, 1776)	MkP
Scapholeberis rammneri (Dumont and Pensaert, 1983)	Kor, Macedonia, Corfu, and Attica
Sida crystallina (O.F. Müller, 1776)	Chi, Doi, Kor, MgP, MkP, Pet, Veg, and Vol
Simocephalus exspinosus (De Geer, 1778)	Ali
Simocephalus serrulatus (Koch, 1841)	Doi and Pet
Simocephalus vetulus (O.F. Müller, 1776)	Ali, Doi, Kas, Kor, MkP, Pam, Pet, Sty, Vol, Zaz, Zir, Crete, Fthiotis, Corfu and Zakynthos
Tretocephala ambigua (Lilljeborg, 1901)	Kor and Macedonia
Wlassicsia pannonica Daday, 1903	Fthiotis

Table 2. Taxonomy and number of cladoceran species per genus.

Class	Superorder	Order	Family	Genera	Number of Species
Branchiopoda	Diplostraca	Anomopoda	Bosminidae	*Bosmina*	2
			Chydoridae	*Acroperus*	1
				Alona	4
				Alonella	3
				Biapertura	1
				Camptocercus	1
				Chydorus	3
				Coronatella	1
				Disparalona	2
				Dunhevedia	1
				Graptoleberis	1
				Kurzia	1
				Leydigia	3
				Monospilus	1
				Ovalona	2
				Oxyurella	1
				Peracantha	1
				Picripleuroxus	2
				Pleuroxus	2
				Pseudochydorus	1
				Tretocephala	1
			Daphniidae	*Ceriodaphnia*	6
				Daphnia	15
				Megafenestra	1
				Scapholeberis	2
				Simocephalus	3
			Eurycercidae	*Eurycercus*	1
			Ilyocryptidae	*Ilyocryptus*	2
			Macrothricidae	*Lathonura*	1
				Macrothrix	3
				Wlassicsia	1
			Moinidae	*Moina*	5
		Haplopoda	Leptodoridae	*Leptodora*	1
		Ctenopoda	Sididae	*Diaphanosoma*	3
				Sida	1

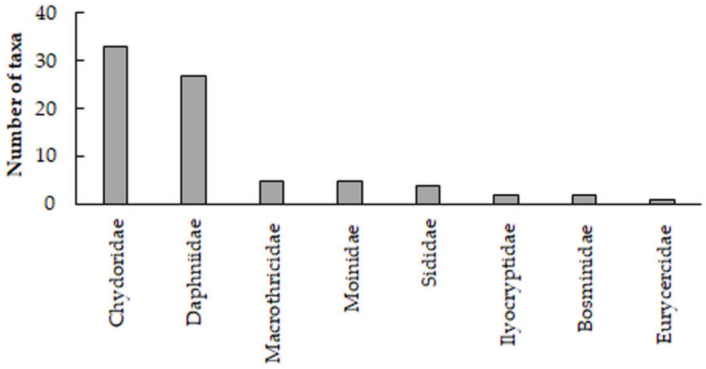

Figure 2. Number of Cladocera species per family recorded in Greek waterbodies.

3.2. Copepoda

The total number of copepod taxa (species or subspecies) reported from Greece was 135; this included taxa recorded from surface water bodies, subterranean water bodies, and parasitic copepods.

3.2.1. Copepods from Surface Water Bodies

The total number of copepod species reported from surface inland water bodies was 78 (Table 3). These were classified into 1 class (Copepoda), 2 superorders (Gymnoplea and Podoplea), 3 orders (Calanoida, Cyclopoida, and Harpacticoida), 12 families, and 34 genera (Table 4). The most diverse family was Cyclopidae with 15 genera and 41 taxa, followed by Diaptomidae with 5 genera and 17 species and Canthocamptidae with 5 genera and 9 taxa (Figure 3). In lakes and reservoirs, for which more extensive data exist, *Cyclops vicinus* and *Macrocyclops albidus* had the highest frequencies of occurrence, with 46% and 43%, respectively.

Table 3. A list of copepod taxa recorded in the studied surface water bodies of Greece (abbreviations according to Figure 1); * indicates species also reported from subterranean water bodies.

Taxa	Region
Calanoida	
Arctodiaptomus alpinus (Imhoff, 1885)	Crete and Fthiotis
Arctodiaptomus bacillifer (Koelbel, 1885) *	Kor
Arctodiaptomus dudichi Kiefer, 1932	Tri and Corfu
Arctodiaptomus kerkyrensis Pesta, 1935	Corfu
Arctodiaptomus pectinicornis (Wierzejski, 1887)	Chi, Pet, Sty, Zaz, and Fthiotis
Arctodiaptomus salinus (Daday, 1885)	Kor and Veg
Arctodiaptomus spinosus (Daday, 1891)	Kor and Pik, Tri
Arctodiaptomus steindachneri (Richard, 1897)	Kar, MgP, MkP, Pam, Tri, Smo, CCh, Kal, and Epirus
Arctodiaptomus stephanidesi stephanidesi (Pesta, 1935)	Macedonia and Corfu
Arctodiaptomus wierzejskii (Richard, 1888)	Macedonia
Calanipeda aquaedulcis Krichagin, 1873	Kou, Crete, Fthiotis, and Corfu
Diaptomus mirus Lilljeborg, 1889	Fthiotis and Corfu
Eudiaptomus drieschi (Poppe and Mrázek, 1895)	Amv, Lys, Oze, Tri, Vou, Dfe, Lad, and Str
Eudiaptomus gracilis (Sars G.O., 1863)	Ali, Doi, MkP, Pin, Pol, Thi, and Corfu
Eudiaptomus graciloides (Lilljeborg, 1888)	MkP and Veg
Eudiaptomus vulgaris (Schmeil, 1896)	Kor, Ker, and Corfu
Mixodiaptomus tatricus (Wierzejski, 1883)	Gis
Neolovenula alluaudi (Guerne and Richard, 1890) *	Pet and Veg
Cyclopoida	
Acanthocyclops einslei Mirabdullayev and Defaye, 2004	Agy and Fthiotis
Acanthocyclops robustus–vernalis (species complex) *	Kar, Kas, Kor, Pam, Pik, Vou, Ker, and Thi
Acanthocyclops trajani Mirabdullayev and Defaye, 2004	Doi, Gis, and Pet
Cyclops abyssorum abyssorum Sars G.O., 1863	Veg
Cyclops ankyrae Mann, 1940	Fthiotis
Cyclops strenuus Fischer, 1851 *	Doi, Kor, MkP, Veg, Corfu, and Zakynthos

Table 3. *Cont.*

Taxa	Region
Cyclops vicinus Uljanin, 1875	Chi, Doi, Kar, Kas, Kor, MgP, MkP, Pam, Pet, Tri, Veg, Vol, Yli, Pol, Smo, Tav, Thi, and Kal
Diacyclops bicuspidatus (Claus, 1857) *	Pam, Vol, and Macedonia
Diacyclops bicuspidatus lubbocki (Brady, 1868) *	Crete, Fthiotis, Corfu, and Epirus
Diacyclops bicuspidatus odessanus (Schmankevitsch, 1875) *	Attica
Diacyclops bisetosus (Rehberg, 1880) *	Kor, Smo, Attica, and Corfu
Diacyclops crassicaudis (Sars G.O., 1863) *	Corfu
Eucyclops agilis (Koch, 1838)	Attica and Corfu
Eucyclops lilljeborgi (Sars G.O., 1918)	Yli and Attica
Eucyclops macruroides (Lilljeborg, 1901)	MgP, MkP, Veg, Yli, and Attica
Eucyclops serrulatus (Fischer, 1851) *	Chi, Doi, Kas, Kou, MgP, MkP, Oze, Pam, Pet, Veg, Vol, Yli, Zaz, Agr, Phocis, Crete, Fthiotis, Macedonia, and Attica
Eucyclops speratus (Lilljeborg, 1901)	Kas, Pam, Yli, Agr, Mar, Attica, and Corfu
Halicyclops rotundipes Kiefer, 1935 *	Corfu
Macrocyclops albidus (Jurine, 1820) *	Amv, Doi, Kas, Kor, Kou, Lys, MgP, MkP, Oze, Pam, Tri, Veg, Vou, Agr, Kre, Smo, Str, Crete, and Epirus
Macrocyclops fuscus (Jurine, 1820) *	Doi, Veg, Agr, Macedonia, and Attica
Megacyclops viridis (Jurine, 1820) *	Chi, Kas, Kor, MgP, Pam, Tri, Crete, Corfu, and Zakynthos
Mesocyclops leuckarti (Claus, 1857)	Doi, MgP, MkP, Pam, Pet, Veg, Vol, Yli, Zaz, Mar, Pol, Tav, CCh, and Attica
Metacyclops gracilis (Lilljeborg, 1853)	Zaz
Metacyclops minutus (Claus, 1863)	Crete, Fthiotis, and Corfu
Metacyclops planus (Gurney, 1909)	Macedonia and Corfu
Microcyclops bicolor (Sars G.O., 1863)	Pam and Corfu
Microcyclops rubellus (Lilljeborg, 1901)	Fthiotis and Corfu
Microcyclops varicans (Sars G.O., 1863)	Pam, Tri, Corfu, and Epirus
Microcyclops varicans bitaenia Fryer, 1957	Pet and Str
Ochridacyclops arndti Kiefer, 1937	Kas and MgP
Paracyclops affinis (Sars G.O., 1863)	Corfu, Zakynthos, and Epirus
Paracyclops fimbriatus (Fischer, 1853) *	Chi, Doi, Kas, Pam, Pet, Veg, Crete, Fthiotis, Macedonia, Attica, and Corfu
Paracyclops fimbriatus abnobensis Kiefer, 1929	Corfu
Paracyclops imminutus Kiefer, 1929	Phocis
Platycyclops phaleratus (Koch, 1838)	Agr, Crete, and Corfu
Speocyclops demetiensis (Scourfield, 1932) *	Phocis
Thermocyclops crassus crassus (Fischer, 1853)	Ali, Chi, Doi, Kas, MgP, MkP, Par, Pet, Veg, Vol, Yli, Zaz, Ker, and Tav
Thermocyclops dybowskii (Landé, 1890) *	Amv, Vol, Vou, Zaz, Smo, and Corfu
Thermocyclops hyalinus (Rehberg, 1880)	Doi, Kas, Pet, Vol, and Ker
Thermocyclops oithonoides (Sars G.O., 1863)	Lys, Kre, and Thi
Thermocyclops stephanidesi Kiefer, 1938 *	Attica and Corfu
Tropocyclops prasinus (Fischer, 1860) *	Zir, Crete, and Corfu
Harpacticoida	
Attheyella (Attheyella) crassa (Sars G.O., 1863) *	Kas, Macedonia, and Corfu
Attheyella (Neomrazekiella) trispinosa (Brady, 1880)	Corfu
Attheyella (Neomrazekiella) wulmeri (Kerhervé, 1914)	Kas and Corfu
Bryocamptus (Bryocamptus) minutus (Claus, 1863) *	Corfu and Epirus
Bryocamptus (Rheocamptus) pygmaeus pygmaeus (Sars G.O., 1863) *	Corfu
Canthocamptus (Canthocamptus) staphylinus (Jurine, 1820) *	Kas, Crete, Fthiotis, and Corfu
Canuella perplexa Scott T. and Scott A., 1893	Corfu
Cletocamptus confluens (Schmeil, 1894)	Corfu
Cletocamptus retrogressus Schmankevitsch, 1875	Crete and Corfu
Leptocaris brevicornis (Douwe, 1904)	Corfu
Mesochra aestuarii Gurney, 1921	Kou and Crete
Microarthridion littorale (Poppe, 1881)	Corfu
Nannopus palustris Brady, 1880	Corfu
Nitokra hibernica hibernica (Brady, 1880)	Vol, Yli, and Mar
Nitokra lacustris (Schmankevitsch, 1875)	Vol, Crete, and Corfu
Nitokra spinipes Boeck, 1865 *	Corfu
Onychocamptus mohammed (Blanchard and Richard, 1891)	Kou, Crete, Attica, and Corfu
Schizopera stephanidesi Pesta, 1938	Corfu

Table 4. The taxonomy and number of copepod taxa per genus for surface water bodies.

Class	Superorder	Order	Family	Genera	Number of Taxa
Copepoda	Gymnoplea	Calanoida	Diaptomidae	*Arctodiaptomus*	10
				Diaptomus	1
				Eudiaptomus	4
				Mixodiaptomus	1
				Neolovenula	1
			Pseudodiaptomidae	*Calanipeda*	1
	Podoplea	Cyclopoida	Cyclopidae	*Acanthocyclops*	3
				Cyclops	4
				Diacyclops	5
				Eucyclops	5
				Macrocyclops	2
				Megacyclops	1
				Mesocyclops	1
				Metacyclops	3
				Microcyclops	4
				Paracyclops	4
				Platycyclops	1
				Speocyclops	1
				Thermocyclops	5
				Tropocyclops	1
				Ochridacyclops	1
			Halicyclopidae	*Halicyclops*	1
		Harpacticoida	Ameiridae	*Nitokra*	3
			Canthocamptidae	*Attheyella*	3
				Bryocamptus	2
				Cletocamptus	2
				Canthocamptus	1
				Mesochra	1
			Canuellidae	*Canuella*	1
			Darcythompsoniidea	*Leptocaris*	1
			Dioscaccinae	*Schizopera*	1
			Laophontidae	*Onychocamptus*	1
			Nannopodidae	*Nannopus*	1
			Tachidiidae	*Microarthridion*	1

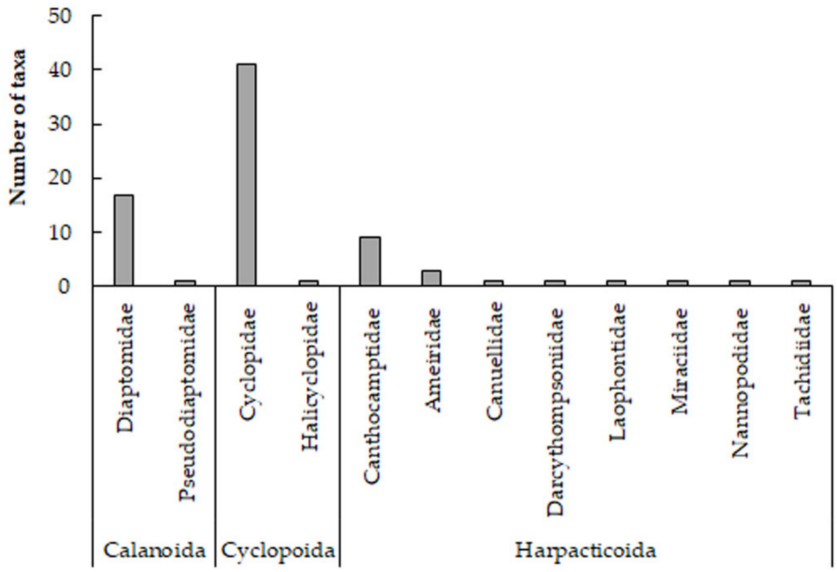

Figure 3. The number of copepod taxa per family recorded in Greek surface water bodies.

3.2.2. Copepods from Subterranean Water Bodies

The total number of copepod species reported from subterranean inland water bodies was 70 (Table 5). These were classified into 1 class (Copepoda), 2 superorders (Gymnoplea and Podoplea), 3 orders (Calanoida, Cyclopoida, and Harpacticoida), 7 families, and

27 genera (Table 6). The most diverse family was Cyclopidae with 11 genera and 35 taxa, followed by Canthocamptidae with 6 genera and 17 taxa (Figure 4).

Table 5. A list of copepod taxa recorded in the studied subterranean water bodies of Greece; * indicates species also reported from surface water bodies.

Subterranean Copepods	Region
Calanoida	
Arctodiaptomus bacillifer (Koelbel, 1885) *	Lesbos
Neolovenula alluaudi (Guerne and Richard, 1890) *	Crete
Cyclopoida	
Acanthocyclops cephallenus Pesce, 1978	Kefalonia
Acanthocyclops robustu—vernalis (species complex) *	Macedonia
Cyclops strenuus Fischer, 1851 *	Zakynthos
Cyclops rubens Müller O.F., 1785	Crete
Diacyclops antrincola Kiefer, 1967	Epirus, Aetolia-Acarnania, Kefalonia, Lesbos, Peloponnese, Zakynthos, and Corfu
Diacyclops bicuspidatus (Claus, 1857)	Peloponnese and Macedonia
Diacyclops bicuspidatus lubbocki (Brady, 1868) *	Lesbos
Diacyclops bicuspidatus odessanus (Schmankevitsch, 1875)	Epirus, Aetolia-Acarnania, Peloponnese, Corfu, Crete, and Zakynthos
Diacyclops bisetosus (Rehberg, 1880)	Epirus, Fthiotis, Crete, Macedonia, and Attica
Diacyclops clandestinus (Yeatman, 1964)	Crete and Macedonia
Diacyclops crassicaudis (Sars G.O., 1863) *	Epirus and Aetolia-Acarnania
Diacyclops crassicaudis cretensis (Kiefer, 1928)	Peloponnese, Corfu, Crete, and Lesbos
Diacyclops hypnicola (Gurney, 1927)	Epirus, Peloponnese, Crete, Kefalonia, and Lesbos
Diacyclops languidoides (Lilljeborg, 1901)	Epirus, Kefalonia, and Peloponnese
Diacyclops languidoides nagysalloensis Kiefer, 1927	Zakynthos
Diacyclops languidus (Sars G.O., 1863)	Epirus
Diacyclops maggii Pesce and Galassi, 1987	Thessalia
Diacyclops pelagonicus Petkovski, 1971	Macedonia
Diacyclops zschokkei (Graeter, 1910)	Epirus, Aetolia-Acarnania, Kefalonia, Peloponnese, Fthiotis, Macedonia, and Attica
Eucyclops serrulatus (Fischer, 1851) *	Epirus, Aetolia-Acarnania, Kefalonia, Peloponnese, Attica, Fthiotis, Thessalia, Crete, Zakynthos, Lesbos, and Macedonia
Halicyclops rotundipes Kiefer, 1935 *	Peloponnese
Halicyclops rotundipes putealis Kiefer, 1938	Peloponnese and Kefalonia
Halicyclops troglodytes Kiefer, 1954	Kefalonia
Macrocyclops albidus (Jurine, 1820) *	Attica, Lesbos, and Macedonia
Macrocyclops fuscus (Jurine, 1820) *	Macedonia
Megacyclops dussarti dussarti Pesce and Maggi, 1977	Epirus and Peloponnese
Megacyclops viridis (Jurine, 1820) *	Epirus, Aetolia-Acarnania, Macedonia, Kefalonia, Peloponnese, Zakynthos, and Crete
Metacyclops subdolus Kiefer, 1938	Crete, Attica, and Peloponnese
Paracyclops fimbriatus (Fischer, 1853) *	Epirus, Aetolia-Acarnania, Kefalonia, Viotia, Peloponnese, Crete, and Macedonia
Speocyclops creticus Lindberg, 1957	Crete
Speocyclops demetiensis (Scourfield, 1932) *	Zakynthos and Crete
Speocyclops demetiensis acrotirii Lindberg, 1955	Crete
Speocyclops demetiensis dubiosus Lindberg, 1956	Crete
Speocyclops demetiensis sitiae Lindberg, 1956	Crete
Thermocyclops dybowskii (Landé, 1890) *	Epirus, Aetolia-Acarnania, and Peloponnese
Thermocyclops oblongatus (Sars G.O., 1927)	Peloponnese, Corfu, Crete, Zakynthos, and Lesbos
Thermocyclops stephanidesi Kiefer, 1938 *	Epirus, Attica, Kefalonia, Peloponnese, Crete, and Corfu
Tropocyclops prasinus (Fischer, 1860) *	Epirus, Kefalonia, Peloponnese, Corfu, Attica, Thessalia, Lesbos, and Crete
Harpacticoida	
Attheyella (Attheyella) crassa (Sars G.O., 1863) *	Lesbos, Peloponnese, Attica, Skyros, and Zakynthos
Attheyella (Neomrazekiella) dentata (Poggenpool, 1874)	Attica
Bryocamptus (Bryocamptus) minutus (Claus, 1863) *	Zakynthos and Crete
Bryocamptus (Rheocamptus) pygmaeus pygmaeus (Sars, G.O., 1863) *	Crete
Canthocamptus staphylinus (Jurine, 1820) *	Peloponnese and Crete
Cottarellicaris aphroditis (Cottarelli and Bruno, 1997)	Kythira
Elaphoidella denticulata Chappuis, 1929	Crete
Elaphoidella elaphoides (Chappuis, 1924)	Epirus, Peloponnese, Evia, Sporades, Lesbos, and Crete
Elaphoidella gracilis (Sars G.O., 1863)	Peloponnese
Elaphoidella karamani Chappuis, 1936	Sporades and Peloponnese

Table 5. *Cont.*

Subterranean Copepods	Region
Elaphoidella minos Chappuis, 1956	Crete
Elaphoidella moreae Pesce, 1981	Peloponnese
Elaphoidella silverii Pesce, 1985	Skyros and Lesbos
Elaphoidella simplex Chappuis, 1944	Peloponnese
Maraenobiotus brucei carpathicus Chappuis, 1928	Crete
Maraenobiotus vejdovskyi Mrázek, 1893	Crete
Megastygonitocrella petkovskii (Pesce, 1985)	Lesbos
Moraria (Moraria) stankovitchi Chappuis, 1924	Crete
Moraria (Moraria) varica (Graeter, 1911)	Crete
Nitocrella achaiae Pesce, 1981	Peloponnese
Nitocrella maggii Pesce, 1983	Lesbos
Nitocrella rhodiensis Pesce, 1983	Rhodes and Lesbos
Nitocrella skyrensis Pesce, 1982	Skyros and Evia
Nitocrella slovenica Petkovski, 1959	Lesbos
Nitocrella stammeri Chappuis, 1938	Skyros, Evia, Crete, and Attica
Nitokra platypus Daday, 1906	Crete
Nitokra spinipes Boeck, 1865 *	Zakynthos
Parapseudoleptomesochra hellenica Pesce, 1981	Skyros
Parastenocaris aesculapii Cottarelli and Bruno, 1997	Kos
Pseudectinosoma reductum Galassi and De Laurentiis, 1997	Thessalia

Table 6. The taxonomy and number of copepod taxa per genus for subterranean water bodies.

Class	Superorder	Order	Family	Genera	Number of Taxa
Copepoda	Gymnoplea	Calanoida	Diaptomidae	*Arctodiaptomus*	1
				Neolovenula	1
	Podoplea	Cyclopoida	Cyclopidae	*Acanthocyclops*	2
				Cyclops	2
				Diacyclops	15
				Eucyclops	1
				Macrocyclops	2
				Megacyclops	2
				Metacyclops	1
				Paracyclops	1
				Speocyclops	5
				Thermocyclops	3
				Tropocyclops	1
			Halicyclopidae	*Halicyclops*	3
		Harpacticoida	Ameiridae	*Megastygonitocrella*	1
				Nitocrella	6
				Nitokra	1
				Parapseudoleptomesochra	1
			Canthocamptidae	*Attheyella*	2
				Bryocamptus	2
				Canthocamptus	1
				Elaphoidella ‘	8
				Maraenobiotus	2
				Monaria	2
			Ectinosomatidae	*Pseudectinosoma*	1
			Parastenocarididae	*Cottarellicaris*	1
				Parastenocaris	1

Species mentioned without specifying the type (surface or subterranean) of the water body are presented in Table 7. Six more taxa, namely *Occidodiaptomus gurneyi, Mixodiaptomus kupelwieseri, Halicyclops magniceps, Bryocamptus (Rheocamptus) zschokkei zschokkei, Elaphoidella eucharis, Elaphoidella varians* were new records for the Greek fauna.

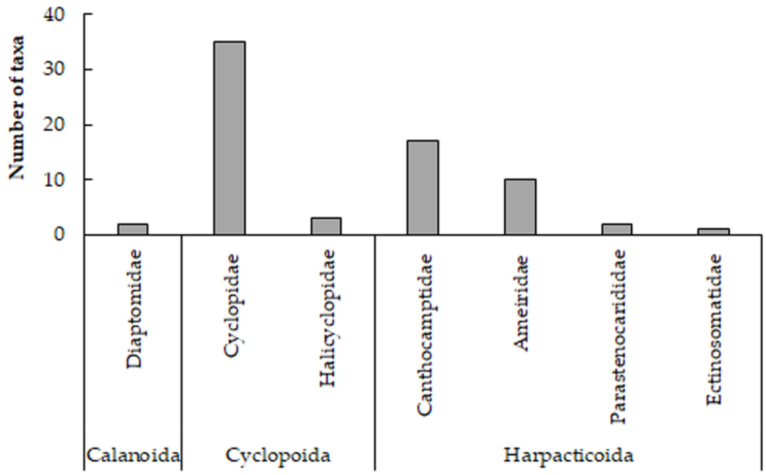

Figure 4. The number of copepod taxa per family recorded in Greek subterranean water bodies.

Table 7. Taxa recorded in Zarfdjian and Economidis [5] without specifying the reference or if the taxa were recorded in surface or subterranean waterbodies. Underlined species have not been reported in the previous studies, n.s.: not specified.

Class	Superorder	Order	Family	Taxa	Region
Copepoda	Gymnoplea	Calanoida	Diaptomidae	*Occidodiaptomus gurneyi* (Roy, 1927)	Corfu
				Mixodiaptomus kupelwieseri (Brehm, 1907)	Corfu
	Podoplea	Cyclopoida	Cyclopidae	*Cyclops strenuus* Fischer, 1851	Greece occidentale and Peloponnese
				Cyclops vicinus Uljanin, 1875	Macedonia
				Diacyclops antrincola Kiefer, 1967	Cos
				Diacyclops languidoides (Lilljeborg, 1901)	Greece centrale, Crete, and Lesbos
				Eucyclops serrulatus (Fischer, 1851)	Corfu
				Halicyclops magniceps (Lilljeborg, 1853)	n.s.
				Megacyclops viridis viridis (Jurine, 1820)	Cos
				Mesocyclops leuckarti (Claus, 1857)	Macedonia and Nisyros
				Paracyclops fimbriatus (Fischer, 1853)	Tilos
				Speocyclops demetiensis (Scourfield, 1932)	Attica and Peloponnese
				Thermocyclops stephanidesi Kiefer, 1938	Macedonia and Lesbos
			Halicyclopidae	*Tropocyclops prasinus* (Fischer, 1860)	Macedonia and Rhodos
		Harpacticoida	Canthocamptidae	*Bryocamptus (Rheocamptus) pygmaeus pygmaeus* (Sars, G.O., 1863)	Attica and Peloponnese
				Bryocamptus (Rheocamptus) zschokkei zschokkei (Schmeil, 1893)	Crete
				Canthocamptus staphylinus (Jurine, 1820)	Lesbos
				Elaphoidella eucharis Chappuis, 1953	n.s.
				Elaphoidella varians Chappuis, 1955	Crete

3.2.3. Parasitic Copepods

The total number of parasitic copepods species was four (Table 8). These were classified into one class (Copepoda), one superorder (Podoplea), two orders (Siphonostomatoida and Cyclopoida), three families, and three genera (Table 8).

Table 8. A list of parasitic copepod taxa recorded in Greece.

Class	Superorder	Order	Family	Taxa	Literature
Copepoda	Podoplea	Siphonostomatoida	Caligidae	*Caligus apodus* (Brian, 1924)	[39]
		Cyclopoida	Ergasilidae	*Ergasilus lizae* Krøyer, 1863	[39]
				Ergasilus sieboldin Nordmann, 1832	[5]
			Lernaeidae	*Lernaea cyprinacea* Linnaeus, 1758	[5]

4. Discussion

4.1. Cladocera

For Cladocera, from the literature review, cases of misidentification were noted, which were not included in the present checklist. For example, *Bythotrephes longimanus* (Leydig, 1860) was recorded in Lake Koronia by Christomanos [40], but based on the photographs provided in reference to this species, its presence cannot be confirmed (the picture shows a copepod and in no other picture is *Bythotrephes* depicted). Another case concerns the prior records of *Diaphanosoma brachyurum* (Liévin, 1848) from 12 lakes (e.g., [41–43]) and *Diaphanosoma lacustris* (Kořínek, 1981) in Lake Karla and Pamvotis [44]. Subsequent studies led to the actual finding of other species in Lake Pamvotis, i.e., *D. mongolianum* (Lake Karla was dried out in the 1960's), which are now mentioned in Table 1, and cases of lakes Doirani, Kastoria, Kerkini, Mikri Prespa, Pamvotis, Paralimni, Vegoritis, and Volvi were confirmed by Alexiou et al. [32] through the use of morphological and molecular analyses. This is generally the case for *D. brachyurum* which has been considered cosmopolitan and is the most recorded *Diaphanosoma* species worldwide due to inadequate knowledge surrounding the morphology, and this name has been erroneously used to refer to other species [32,45] and it cannot be located in many of those regions anymore [32,46] as other *Diaphanosoma* species are now recorded [47].

A case with complex taxonomy is that of *Daphnia hyalina.* Phenotypically and ecologically speaking, it is a highly variable species, but it was proposed to be synonymous with *Daphnia longispina* based on molecular data [48,49]. These findings are currently considered only a hypothesis which should be checked in subsequent studies based on a recent critical review of the genus *Daphnia* [25]. We present it here as a species following the taxonomy presented in WoRMS [31]. Based on our data, *Daphnia hyalina* is a species commonly recorded in the first studies (e.g., [4,6,41,50]), while subsequent studies recorded *D. cucullata* and/or *Daphnia galeata* in the same lakes. *Daphnia hyalina* is found to hybridize with *D. cucullata* and *D. galeata*, forming hybrids and further increasing the morphological variability [51,52]. It is also gradually replaced by *D. galeata* during periods of eutrophication [48]. The future identification of *Daphnia* species in faunistic studies, combining morphological and molecular data, should be performed to verify the occurrence of these confusing taxonomical identities.

4.2. Copepoda

Copepod species, commonly recorded during the first few studies performed in Greece, were not recently found in the same water bodies; this could be explained by species misidentification due to a lack of proper and updated taxonomic keys, the subsequent identification of species complexes, or species replacement. From the literature review, cases of misidentification of copepod species were noted. For example, *Macrocyclops fuscus* was recorded in Lake Koronia by Christomanos [40] (as *Cyclops fuscus*), but based on the published photographs in reference to this species, its presence cannot be confirmed based on the morphology of the furcal rami. Based on the photographs given by Christomanos [40], this individual could be *C. vicinus*, which is known to have established populations in Lake Koronia (e.g., [42,53]). Another case is the calanoid *Limnocalanus macrurus* (Sars G.O., 1863) which is recorded in Lake Stratos [54], but is probably a misidentification since it is a marine–brackish species [31]. Invasions into freshwaters are recorded in lakes created at the margins of ice sheets after glaciers [48], while Stratos reservoir,

situated in Acheloos River in western Greece, has low conductivity (<400 mS/m) [54]; thus, the presence of *L. macrurus* is questionable.

Cases with complex taxonomy were also recorded. Stephanides [6] recorded in Corfu "*Diaptomus serbicus* = *Diaptomus mirus*" and Marrone et al. [19] recorded *Diaptomus* cf. *serbicus* in Fthiotis. *Diaptomus serbicus* (Gjorgjevic, 1907) is considered to be synonymous with *Diaptomus mirus serbicus* [55], and the accepted name is *Diaptomus mirus* (Lilljeborg, 1889), according to WoRMS [31], which represents a species complex [56]. Thus, in Table 3, *D. mirus* is presented in both Corfu and Fthiotis, awaiting further clarification. Another case is the *Ecyclops serrulatus* group. *E. serrulatus* was recorded in many lakes and regions of Greece from both surface and subterranean waters (Table 3). Based on recent studies, about 19 valid species belong to the *serrulatus* group, with 6 of them being reported from Europe [48]. Moreover, *Cyclops agilis* (Koch, 1938) is synonymous to *Eucyclops agilis* (Koch, 1938) [31] and is sometimes equated with *E. serrulatus* [57]. In Greece, Stephanides found *E. agilis* in Corfu [6] (mentioning "*C. agilis-C. serrulatus* s. restr.") and in Attica [36]; we present these records in Table 3 since *E. agilis* is considered a valid species in WoRMS [31]. Molecular analysis should be performed in future studies to verify the occurrence of *E. agilis* and *E. serrulatus* taxa in Greece. Another case is the genus *Thermocyclops*; in the prior studies, *Thermocyclops hyalinus* was a commonly found cyclopoid, while *Thermocyclops crassus* was later recorded in the same lakes (Table 3). Despite mentioning both species as synonymous in many studies (e.g., [48,58]), WoRMS refer to both species as valid [31]. *Thermocyclops crassus* has also been confused with *Thermocyclops oithonoides* [58], a species also recorded in Greece. Future studies in water bodies with more than one species from the genus *Thermocyclops* will reveal the correct distribution of this genus in Greece.

Cases of calanoid species recorded in former studies but not found in the same water bodies in more recent studies were also recorded. For example, *Arctodiaptomus dudichi*, *Arctodiaptomus stephanidesi*, and *A. steindachneri* in Lake Trichonis were recorded by Koussouris (as mentioned by [5,59]); however they were not found in more recent studies (e.g., [60,61]). The same stands for Lake Koronia with *Arctodiaptomus bacillifer* [62], *Arctodiaptomus salinus* and *Eudiaptomus vulgaris* [4]; however, this lake has dried up several times (2002, 2007, 2009, and 2014) [53] and some species did not re-establish populations.

Copepods from subterranean water bodies were mainly studied in the past. Their research started with Lindberg [63,64] and Chappuis [65] and was continued by Stephanides [36]. Later, a series of studies from 1977 to 1986 by de Giuseppe L. Pesce and Domenico Maggi and their team focused on both the Greek islands and the Greek mainland, while recently these habitats have been understudied, with only two studies [66,67] being published over the last few decades. So, additional species are expected to be found by future studies, considering that subterranean waters have not been extensively studied in many parts of Greece. It should also be acknowledged that many of these studies have new descriptions of species or subspecies (e.g., [12–16,66]), and that even new descriptions of endemic species may arise.

The subterranean fauna included taxa characteristic of the surface waters (e.g., *Acanthocyclops robustus–vernalis* species complex, *A. bacillifer*, and *Neolovenula alluaudi*) which can accidentally be found in the upper layers of subterranean waters [16]. This knowledge can be used to better understand the dispersal of these species to nearby water bodies.

Parasitic copepods are understudied in Greece. Only one study [39] was found during the literature review reporting *Caligus apodus* as a parasite to *Chelon ramada* (Risso, 1827), while *Ergasilus lizae* to *Mugil cephalus* (Linnaeus, 1758). *Lernaea cyprinacea*, and *Ergasilus sieboldin* were mentioned in the previous checklist [5], based on unpublished studies, but are known as serious fish pests, causing mass mortality and significant commercial losses in freshwater aquaculture [24]. However, parasitic copepods were also found in other lakes [e.g., Kourna and Paralimni (personal data)] without being identified.

4.3. Overall

The diversity of both cladoceran and copepod communities from surface inland water bodies is most probably underestimated due to various factors. First, the sampling efforts

are not the same for all types of habitats across Greece. Over the last few decades, many research studies have focused on the monitoring of surface water bodies, especially lakes, and the ways that they function (e.g., [53,59,68–70]), while other important habitats such as temporary pools, swamps, ditches, and puddles were studied only in some parts of Greece (e.g., islands such as Corfu and Zakynthos [6,7]; Crete [18]; and regional units such as Attica [36], Epirus [6], and Fthiotis [19]). Thus, many regions have not been explored, especially islands, and rivers and temporary waterbodies are not well studied either; therefore, additional species are expected to be found in future studies. Even when lakes are studied, samplings are usually conducted at the deepest part of the lakes [71,72], so littoral species have been underestimated. Studies with long timeseries are missing, while many studies have sparce samplings, usually limited to the summer–autumn season of lakes (e.g., [73]). Furthermore, considering that subterranean and especially parasitic copepods are vastly understudied in Greece, the gab of knowledge concerning their diversity is even higher. Another factor of species richness underestimation can be connected to the presence of cryptic taxa, revealed through the application of analyses in molecular approaches using integrative taxonomy. Thus, future studies should focus on long-term monitoring, with sampling stations covering different habitats or unexplored water habitats to increase the species richness of Cladocera and Copepoda in Greece.

Another aspect regarding future studies is related to the functional traits of organisms. Based on data availability, cladocerans are more extensively studied compared to copepods [33], where data for groundwater copepods are scarce (Tables S2–S4). This knowledge gap is bigger for species without global distribution or rare species (usually littoral) which do not commonly dominate zooplankton communities.

5. Conclusions

The present study provides an updated checklist of cladocerans and copepods from inland water bodies of Greece based on a compilation of published and current data from 1892 up to 2022. The results identify the knowledge gap that exists concerning the Greek crustacean planktonic fauna associated with specific taxa (e.g., Harpacticoida), habitats (e.g., littoral zone, subterranean, and small water bodies), and regions, emphasizing the importance of its study under the light of a global increase in invasive species and the concomitant threat faced by aquatic ecosystems due to changes in species composition and food web relationships. Future studies should use the current checklist as a reference and set the goals for biodiversity exploration in understudied areas and habitats, as well as disentangle taxonomic cases that are locally and globally identified as problematic. Following this, ecological studies should be performed to identify the keystone species which are important for the functioning, restoration, and management of ecosystems.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/d14110997/s1. Table S1: Water bodies' characteristics; Table S2: Cladocera's raw data; Table S3: Surface Copepoda' s raw data; Table S4: Subterranean Copepoda' s raw data. References [74–123] are cited in the supplementary materials.

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References

1. Richard, J. Animaux Inférieurs, Notamment Entomostracés, Recueillis Par M. Le Prof. Steindachner Dans Les Lacs de La Macédoine. *Ann. K.R. Nat. Hist. Hofmus. Wien.* **1892**, *7*, 151–153.
2. Richard, J. Entomostracés, Recueillis par M. Le Directeur Steindachner dans les Lacs de Janina et de Scutari. *Ann. Nat. Mus. Wien* **1897**, *12*, 63–66.
3. Stamou, G.; Savva, A.; Demertzioglou, M.; Michaloudi, E. Diversity of Rotifera (Subclass: Monogononta) from Inland Water Bodies in Greece: An Updated Checklist. *Diversity* **2022**, *14*, 451. [CrossRef]
4. Georgevitch, J. Les Organisms du Plankton des Grands Lacs de la Peninsula Balkanique. *Mem. Société Zool. Fr.* **1907**, *20*, 5–19.
5. Zarfdjian, M.H.; Economidis, P.S. Listes Provisoires des Rotifères, Cladocéres et Copépodes des Eaux Continentales Grecques. *Biol. Gallo-Hell.* **1989**, *15*, 129–146.
6. Stephanides, T. Synoptic Notes on the Fresh-Water Organisms of Certain Regions of Macedonia and Central Greece. *Prakt. Hell Inst.* **1948**, *2*, 205–213.
7. Stephanides, T. A Seasonal Survey of the Entomostraca in Three Corfu Ponds. *Prakt. Hell. Hydrobioligal Inst.* **1960**, *7*, 5–20.
8. Stephanides, T. Some Notes on the Entomostraca of Corfu Greece, after Interval of 23 Years. *Prakt. Hell. Hydrobioligal Inst.* **1960**, *7*, 3–10.
9. Stephanides, T. Some Further Notes on the Entomostraca of Corfu, Greece, after an Interval of 25 Years. *Prakt. Hell. Hydrobioligal Inst.* **1964**, *9*, 1–12.
10. Pesce, G.L.; Maggi, D. Un nouveau Cyclopide des eaux souterraines phréatiques de Gréce: *Acanthocyclops (Megacyclops) dussarti* n.sp. (Crustacea, Copepoda). *Vie Milieu* **1977**, *27*, 77–82.
11. Pesce, G.L. A New Cyclopid from Subterranean Phreatic Waters of Greece *Acanthocyclops (Acanthocyclops) cephallenus* n. sp. (Crustacea: Copepoda). *Vie Milieu* **1978**, *28–29*, 77–82.
12. Pesce, G.L. Some Harpacticoids from Subterranean Waters of Greece (Crustacea: Copepoda). *Bolletino Zool.* **1981**, *48*, 263–276. [CrossRef]
13. Pesce, G.L. A New *Nitocrella* Chappuis 1923 from Phreatic Waters of Skyros Island, Greece. *Senckenberg. Biol.* **1981**, *62*, 399–403.
14. Pesce, G.L. A New *Nitocrella* from Phreatic Subterranean Waters of Rhodes, Greece (Crustacea Copepoda, Harpacticoida). *Rev. Suisse Zool.* **1983**, *90*, 263–267.
15. Pesce, G.L. A Revised Key to the *Nitocrella* Species of the Hirta-Group, Including the Description of a New Species from Phreatic Waters of Lesbos, Greece (Copepoda Harpacticoida: Ameiridae). *Bull. Zool. Mus.* **1983**, *9*, 109–113.
16. Pesce, G.L. A New Harpacticoid from Phreatic Waters of Lesbos, Greece, and Notes on the "Rassenkreise" of *Elaphoidella elaphoides* (Chappuis) (Copepoda: Ameiridae). *Rev. Suisse Zool.* **1985**, *92*, 605–612. [CrossRef]
17. Pesce, G.L. Arpacticoidi Stigobionti di Grecia (Crustacea: Copepoda). *Zool. Ellenica.* **1986**, 25–34.
18. Marrone, F.; Giuseppe, A.; Stoch, F.; Pieri, V.; Alonso, M.; Dretakis, M.; Naselli-Flores, L. An Account on the Non-Malacostracan Crustacean Fauna from the Inland Waters of Crete, Greece, with the Synonymization of *Arctodiaptomus piliger* Brehm, 1955 with *Arctodiaptomus alpinus* (Imhof, 1885) (Copepoda: Calanoida). *Limnetica* **2019**, *38*, 167–187. [CrossRef]
19. Marrone, F.; Arculeo, M.; Georgiadis, C.; Stoch, F. On the Non-Malacostracan Crustaceans (Crustacea: Branchiopoda, Copepoda, Ostracoda) from the Inland Waters of Fthiotida (Greece). *Biogeogr-J. Integr. Biogeogr.* **2019**, *34*, 87–99. [CrossRef]
20. Dumont, H.J. Biogeography of Rotifers. *Hydrobiologia* **1983**, *104*, 19–30. [CrossRef]
21. Segers, H.; De Smet, W.H. Diversity and endemism in Rotifera: A review, and *Keratella bory* de St Vincent. *Biodivers Conserv.* **2008**, *17*, 303–316. [CrossRef]
22. Fontaneto, D.; Barbosa, A.M.; Segers, H.; Pautasso, M. The 'Rotiferologist' Effect and Other Global Correlates of Species Richness in Monogonont Rotifers. *Ecography* **2012**, *35*, 174–182. [CrossRef]
23. Ejsmont-Karabin, J. Does the World Need Faunists? Based on Rotifer (Rotifera) Occurrence Reflections on the Role of Faunistic Research in Ecology. *Int. Rev. Hydrobiol.* **2019**, *104*, 49–56. [CrossRef]
24. Boxshall, G.A.; Defaye, D. Global Diversity of Copepods (Crustacea: Copepoda) in Freshwater. *Hydrobiologia* **2008**, *595*, 195–207. [CrossRef]
25. Kotov, A.A. A Critical Review of the Current Taxonomy of the Genus *Daphnia* OF Müller, 1785 (Anomopoda, Cladocera). *Zootaxa* **2015**, *3911*, 184–200. [CrossRef]
26. Forró, L.; Korovchinsky, N.M.; Kotov, A.A.; Petrusek, A. Global Diversity of Cladocerans (Cladocera; Crustacea) in Freshwater. *Hydrobiologia* **2007**, *595*, 177–184. [CrossRef]
27. Darwall, W.; Carrizo, S.; Numa, C.; Barrios, V.; Freyhof, J.; Smith, K. *Freshwater Key Biodiversity Areas in the Mediterranean Basin Hotspot: Informing Species Conservation and Development Planning in Freshwater Ecosystems*, 1st ed.; IUCN: Cambridge, UK; Malaga, Spain, 2014; pp. 1–100.
28. Shumka, S. Checklist of Rotifer Species from Albania (Phylum Rotifera). *Opusc. Zool. Bp.* **2021**, *52*, 99–109. [CrossRef]
29. Tasevska, O.; Guseska, D.; Kostoski, G. A Checklist of Monogonont Rotifers (Rotifera: Monogononta) of Lake Ohrid, Republic of Macedonia. *Acta Zool. Bulg. Suppl.* **2019**, *13*, 57–62.
30. Iepure, S.; Bădăluţă, C.A.; Moldovan, O.T. An Annotated Checklist of Groundwater Cyclopoida and Harpacticoida (Crustacea, Copepoda) from Romania with Notes on Their Distribution and Ecology. *Subterr. Biol.* **2021**, *41*, 87. [CrossRef]
31. WoRMS Editorial Board. World Register of Marine Species. 2022. Available online: https://www.marinespecies.org (accessed on 31 August 2022).

32. Alexiou, R.; Stamou, G.; Minoudi, S.; Tourli, F.; Tsartsianidou, V.; Triantafyllidis, A.; Michaloudi, E. The Genus *Diaphanosoma* (Diplostraca: Sididae) in Greece: Morphological and Molecular Assessment. *Zootaxa* **2021**, *5082*, 572–582. [CrossRef]
33. Barnett, A.J.; Finlay, K.; Beisner, B.E. Functional Diversity of Crustacean Zooplankton Communities: Towards a Trait-Based Classification. *Freshw. Biol.* **2007**, *52*, 796–813.
34. Rizo, E.Z.C.; Gu, Y.; Papa, R.D.S.; Dumont, H.J.; Han, B.P. Identifying Functional Groups and Ecological Roles of Tropical and Subtropical Freshwater Cladocera in Asia. *Hydrobiologia* **2017**, *799*, 83–99. [CrossRef]
35. Walseng, B.; Hessen, D.O.; Halvorsen, G.; Schartau, A.K. Major Contribution from Littoral Crustaceans to Zooplankton Species Richness in Lakes. *Limnol. Oceanogr.* **2006**, *51*, 2600–2606. [CrossRef]
36. Stephanides, T. A Note on the Entomostraca of the Athens Area with Some Observations of the Life—History of *Moina rectirostris*. *Prakt. Hell. Hydrobioligal Inst.* **1964**, *9*, 1–9.
37. Dumont, H.J. Groundwater Cladocera: A Synopsis. *Hydrobiologia* **1987**, *145*, 169–173. [CrossRef]
38. Brancelj, A.; Dumont, H.J. A Review of the Diversity, Adaptations and Groundwater Colonization Pathways in Cladocera and Calanoida (Crustacea), Two Rare and Contrasting Groups of Stygobionts. *Fundam. Appl. Limnol. Arch. Fuer Hydrobiol.* **2007**, *168*, 3–17. [CrossRef]
39. Ragias, V.; Athanassopoulou, F.; Sinis, A. Parasites of Mugilidae spp Reared under Semi- Intensive and Intensive Conditions in Greece. *Bull. Eur. Assoc. Fish Pathol.* **2005**, *25*, 107–113.
40. Christomanos, A. Zur Kenntnis Des Planktons Der Seen Griechenlands. II. *Folia Bioch Biol. Greeca* **1972**, *4*, 127–144.
41. Popovska-Stankovič, O. Prilog Kon Poznavanje Kladocerite Od Dojranskoto Ezero. Izd. Instituta Piscic. *Repub. Makedonia Skopje* **1958**, *2*, 127–144.
42. Serafimova-Hadžišče, J. Zooplankton in Some Lakes of Aegean Lake Zone. *Fragm. Balc.* **1974**, *17*, 165–168.
43. Koussouris, T.S.; Diapoulis, A.C.; Photis, G.D. Evaluating the Trophic Status of a Shallow Polluted Lake, Lake Ioannina, Greece. *Toxicol. Environ. Chem.* **1991**, *31*, 303–313. [CrossRef]
44. Kořínek, V. *Diaphanosoma birgei* n. sp. (Crustacea, Cladocera). A New Species from America and Its Widely Distributed Subspecies *Diaphanosoma birgei* ssp. *lacustris* n. ssp. *Can. J. Zool.* **1981**, *59*, 1115–1121. [CrossRef]
45. Korovchinsky, N.M. *Cladocera: Ctenopoda: Families Sididae, Holopediidae & Pseudopenilidae (Branchiopoda: Cladocera). Identification Guides to the Plankton and Benthos of Inland Waters*, 1st ed.; Backhuys Publishers-Margraf Publishers GmbH: Weikerscheim, Germany, 2018; pp. 1–203.
46. Lakatos, C.; Urabe, J.; Makino, W. Cryptic Diversity of Japanese Diaphanosoma (Crustacea: Cladocera) Revealed by Morphological and Molecular Assessments. *Inland Waters* **2015**, *5*, 253–262. [CrossRef]
47. Karpowicz, M.; Świslocka, M.; Slugocki, L.; Czerniawski, R.; López, C.; Kornijów, R. Distribution of *Diaphanosoma* (Diplostraca: Sididae) Genus in Central Europe–Morphological and Molecular Approach. *Eur. Zool. J.* **2022**, *89*, 1115–1128. [CrossRef]
48. Bledzki, L.A.; Rybak, J.I. *Freshwater Crustacean Zooplankton of Europe: Cladocera & Copepoda (Calanoida, Cyclopoida) Key to Species Identification, with Notes on Ecology, Distribution, Methods and Introduction to Data Analysis*; Springer: Berlin, Germany, 2016; pp. 1–918.
49. Petrusek, A.; Hobæk, A.; Nilssen, J.P.; Skage, M.; ČErnỳ, M.; Brede, N.; Schwenk, K. A Taxonomic Reappraisal of the European *Daphnia longispina* complex (Crustacea, Cladocera, Anomopoda). *Zool. Scr.* **2008**, *37*, 507–519. [CrossRef]
50. Popovska-Stankovic, O. Die Plankton-Production Des Dojran-Sees, Vom Aug. 1951 Bis Aug 1952. *Inst. Piscic. RP Macédoine Skopje* **1954**, *1*, 1–20.
51. Benzie, J.A. The Systematics of Australian *Daphnia* (Cladocera: Daphniidae). Species Descriptions and Keys. *Hydrobiologia* **1988**, *166*, 95–161. [CrossRef]
52. Wolf, H.G.; Mort, M.A. Inter-Specific Hybridization Underlies Phenotypic Variability in *Daphnia* Populations. *Oecologia* **1986**, *68*, 507–511. [CrossRef]
53. Demertzioglou, M.; Antonopoulou, E.; Voutsa, D.; Kozari, A.; Moustaka-Gouni, M.; Michaloudi, E. MAPKs and HSPs' Activation of a Natural Daphnia magna Population in a Man-Perturbed Lake: Implications of Ecological Significance. *Water* **2021**, *13*, 283. [CrossRef]
54. Kehayias, G.; Chalkia, E.; Chalkia, S.; Nistikakis, G.; Zacharias, I.; Zotos, A. Zooplankton Dynamics in the Upstream Part of Stratos Reservoir (Greece). *Biologia* **2008**, *63*, 699–710. [CrossRef]
55. Djordjević, J. Prilozi Za Poznavanje Slatkovodne Faune Balkan. *Poluostrva II Makedon. Hidrahnide Glas Srp. Kralj. Akad. Nauka Beogr.* **1907**, *71*, 123–150.
56. Alfonso, G.; Stoch, F.; Marrone, F. An annotated checklist and bibliography of the Diaptomidae (Copepoda, Calanoida) of Italy, Corsica, and the Maltese islands. *J. Limnol.* **2021**, *80*, 43–58. [CrossRef]
57. Alekseev, V.; Dumont, H.J.; Pensaert, J.; Baribwegure, D.; Vanfleteren, J.R. A Redescription of *Eucyclops serrulatus* (Fischer, 1851) (Crustacea: Copepoda: Cyclopoida) and Some Related Taxa, with a Phylogeny of the *E. serrulatus*-group. *Zool. Scr.* **2006**, *35*, 123–147. [CrossRef]
58. Defaye, D.; Dussart, B.H.; Fernando, C.H.; Sarnita, A.S. On Some Species of the Genus *Thermocyclops* (Crustacea, Copepoda) from the Oriental Region. *Can. J. Zool.* **1987**, *65*, 3144–3153. [CrossRef]
59. Doulka, E.; Kehayias, G. Spatial and Temporal Distribution of Zooplankton in Lake Trichonis (Greece). *J. Nat. Hist.* **2008**, *42*, 575–595. [CrossRef]
60. Doulka, E.; Kehayias, G.; Chalkia, E.; Leonardos, I.D. Feeding Strategies of *Atherina boyeri* (Risso 1810) in a Freshwater Ecosystem. *J. Appl. Ichthyol.* **2013**, *29*, 200–207. [CrossRef]

61. Kehayias, G.; Michaloudi, E.; Bexi, A. Aspects on the Seasonal Dynamics and the Vertical Distribution of the Crustacean Zooplankton Community and the *Dreissena polymorpha* Larvae in Lake Trichonis. *Mediterr. Mar. Sci.* **2004**, *5*, 19–27. [CrossRef]
62. Kilikidis, S.; Kamarianos, A.; Photis, G.; Koussouris, T.; Karamanlis, X.; Ouzounis, K. Ecological Study on Lakes of Northern Greece Ag. Vassiliou, Doirani and Vistonis. Assumptions to Install a Station for Reproduction and Experimental Fishery. *Sci. Ann. Vet. Fac. Univ. Thessalon.* **1984**, *22*, 269–439.
63. Lindberg, K. Cyclopides (Crustacés Copépodes) de La Grece II. *Fragm. Balcan. Skopje* **1955**, *1*, 189–195.
64. Lindberg, K. Cyclopides (Crustaces Copepodes) de Crete avec une liste de crustaces divers recueillis dans le lac de Kourna. *Acta* **1955**, *4*, 97–120.
65. Chappuis, P.A. Harpacticoides Recoltes En Crete Par M. K. Lindberg. *Folia Balc.* **1956**, *3*, 15–18.
66. Cottarelli, V.; Bruno, M.C. First Record of Parastenocarididae (Crustacea, Copepoda, Harpacticoida) from Subterranean Freshwater of Insular Greece and Description of Two New Species. *Int. J. Speleol.* **1996**, *25*, 43–57. [CrossRef]
67. Popa, I.; Brad, T.; Vaxevanopoulos, M.; Giurginca, A.; Baba, Ş.C.; Iepure, S.; Plăiaşu, R.; Sarbu, S.M. Rich and Diverse Subterranean Invertebrate Communities Inhabiting Melissotrypa Cave in Central Greece. *Trav. Inst. Spéol. «Émile Racovitza»* **2019**, *58*, 65–78.
68. Michaloudi, E.; Zarfdjian, M.; Economidis, P.S. The Zooplankton of Lake Mikri Prespa, Northwestern Greece. *Hydrobiologia* **1997**, *351*, 77–94. [CrossRef]
69. Michaloudi, E.; Moustaka-Gouni, M.; Pantelidakis, K.; Katsiapi, M.; Genitsaris, S. Plankton Succession in the Temporary Lake Koronia after Intermittent Dry-Out. *Int. Rev. Hydrobiol.* **2012**, *97*, 405–419. [CrossRef]
70. Stefanidis, K.; Papastergiadou, E. Influence of Hydrophyte Abundance on the Spatial Distribution of Zooplankton in Selected Lakes in Greece. *Hydrobiologia* **2010**, *656*, 55–65. [CrossRef]
71. Stamou, G.; Katsiapi, M.; Moustaka-Gouni, M.; Michaloudi, E. Trophic State Assessment Based on Zooplankton Communities in Mediterranean Lakes. *Hydrobiologia* **2019**, *844*, 83–103. [CrossRef]
72. Mazaris, A.D.; Moustaka-Gouni, M.; Michaloudi, E.; Bobori, D.C. Biogeographical Patterns of Freshwater Micro and Macroorganisms: A Comparison between Phytoplankton, Zooplankton and Fish in the Eastern Mediterranean. *J. Biogeogr.* **2010**, *37*, 1341–1351. [CrossRef]
73. Stamou, G.; Katsiapi, M.; Moustaka-Gouni, M.; Michaloudi, E. The Neglected Zooplankton Communities as Indicators of Ecological Water Quality of Mediterranean Lakes. *Limnetica* **2021**, *40*, 359–373. [CrossRef]
74. Chalkia, E.; Zacharias, I.; Thomatou, A.A.; Kehayias, G. Zooplankton Dynamics in a Gypsum Karst Lake and Interrelation with the Abiotic Environment. *Biologia* **2012**, *67*, 151–163. [CrossRef]
75. Danielidis, D.B.; Spartinou, M.; Economou-Amilli, A. Limnological Survey of Lake Amvrakia, Western Greece. *Hydrobiologia* **1996**, *318*, 207–218. [CrossRef]
76. Bláha, M.; Hulák, M.; Slouková, J.; Těšitel, J. Molecular and Morphological Patterns across *Acanthocyclops vernalis-robustus* species Complex (Copepoda, Cyclopoida). *Zool. Scr.* **2010**, *39*, 259–268. [CrossRef]
77. Shehu, M.; Serravalle, F.; Alfonso, G.; Moscatello, S.; Belmonte, G. The Alpine Gistova (Mount Gramos, Albania-Greece Border) Biodiversity of an Isolated Microcosm. *Thalass. Salentina* **2009**, *32*, 53–62.
78. Koussouris, T.; Diapoulis, A.; Fotis, G. *For The Development and Drotection of Freshwater Resources in Greece. II Kastoria*; Technical report; Institute of Oceanographic and Fisheries Research: Kastoria, Greece, 1985.
79. Petkovski, S. Über Die Plankton-Cladoceren Des Kastorias-Sees in NW Griechenland (Crustacea, Anomopoda). *Scopolia* **1992**, *26*, 1–22.
80. Matzafleri, N.; Psilovikos, A.; Sentas, A. Zooplankton Population Seasonal Variations in Relation to Nutrients. Case Study of Lake Kastoria, Western Macedonia, Greece. *Fresenius Environ. Bull.* **2017**, *26*, 1318–1324.
81. Kilikidis, S.; Kamarianos, A.; Karamanlis, X.; Dellis, S.; Kousouris, T.; Fotis, G. Water Quality and Trophic Status Evaluation of the Polyphyto Reservoir, N. Greece. *Toxicol. Environ. Chem.* **1992**, *36*, 169–179. [CrossRef]
82. Politou, C.Y.; Economidis, P.S.; Sinis, A.I. Feeding Biology of Bleak, *Alburnus alburnus*, in Lake Koronia, Northern Greece. *J. Fish Biol.* **1993**, *43*, 33–43. [CrossRef]
83. Michaloudi, E.; Kostecka, M. Zooplankton of Lake Koroneia (Macedonia, Greece). *Biol. Bratisl.* **2004**, *59*, 165–172.
84. Michaloudi, E.; Moustaka-Gouni, M.; Gkelis, S.; Pantelidakis, K. Plankton Community Structure during an Ecosystem Disruptive Algal Bloom of *Prymnesium parvum*. *J. Plankton Res.* **2009**, *31*, 301–309. [CrossRef]
85. Moustaka-Gouni, M.; Michaloudi, E.; Kormas, K.A.; Katsiapi, M.; Vardaka, E.; Genitsaris, S. Plankton Changes as Critical Processes for Restoration Plans of Lakes Kastoria and Koronia. *Eur. Water* **2012**, *40*, 43–51.
86. Serafimoska-Hadžišče, J. Vertical Migrations of Zooplankton in Lake Prespa. *Rev. Trav. Stat. Hydrobiol. Ohrid* **1954**, *2*, 29–38.
87. Chalkia, E.; Kehayias, G. Zooplankton and Environmental Factors of a Recovering Eutrophic Lake (Lysimachia Lake, Western Greece). *Biologia* **2013**, *68*, 459–469. [CrossRef]
88. Katsiapi, M.; Michaloudi, E.; Moustaka-Gouni, M.; Lo, J.P. First Ecological Evaluation of the Ancient Balkan Lake Megali Prespa Based on Plankton. *J. Biol. Res.* **2012**, *17*, 51–56.
89. Stathatos, P.; Barry, J.; Christomanou, M.; Christomanos, A. Beitrag Zur Planktonkunde Des Kleinen Prespa Sees in Mazedonien (Griechenland). *Folia Biochem. Biol. Graeca* **1972**, *9*, 12–26.
90. Michaloudi, E. Dry Weights of the Zooplankton of Lake Mikri Prespa (Macedonia, Greece). *Elgian J. Zool.* **2005**, *135*, 223–227.
91. Chalkia, E.; Kehayias, G. Zooplankton Community Dynamics and Environmental Factors in Lake Ozeros (Greece). *Mediterr. Mar. Sci.* **2013**, *14*, 32–41. [CrossRef]

92. Antonopoulos, A.; Kagalou, I.; Michaloudi, E.; Leonardos, I. Limnological Features of a Shallow Eutrophic Lake (Lake Pamvotis, Greece) with Emphasis on Zooplankton Community Structure. *Oceanol. Hydrobiol. Stud.* **2008**, *37*, 1–14.
93. Gkenas, C.; Malavasi, S.; Leonardos, I. Diet and Feeding Habits of *Economidichthys pygmaeus* (Perciformes: Gobiidae) in Lake Pamvotis, NW Greece: Diet of *Economidichthys pygmaeus*. *J. Appl. Ichthyol.* **2012**, *28*, 75–81. [CrossRef]
94. Gkenas, C.; Oikonomou, A.; Economou, A.; Kiosse, F.; Leonardos, I. Life History Pattern and Feeding Habits of the Invasive Mosquitofish, *Gambusia holbrooki*, in Lake Pamvotis (NW Greece). *J. Biol. Res.* **2012**, *17*, 121–136.
95. Chrisafi, E.; Kaspiris, P.; Katselis, G. Feeding Habits of Sand Smelt (*Atherina boyer*i, Risso 1810) in Trichonis Lake (Western Greece). *J. Appl. Ichthyol.* **2007**, *23*, 209–214. [CrossRef]
96. Doulka, E.; Kehayias, G. Seasonal Vertical Distribution and Diel Migration of Zooplankton in a Temperate Stratified Lake. *Biologia* **2011**, *66*, 308–319. [CrossRef]
97. Kehayias, G.; Tzavali, A.; Gini, M.; Michopoulou, E.; Tsounis, L. Fish Predation in the Proximity of Purse Seine Fishing Lights: The Case of *Atherina boyeri* (Actinopterygii: Atheriniformes: Atherinidae) in a Greek Lake. *Acta Ichthyol. Piscat.* **2018**, *48*, 51–60.
98. Muller, H. Zur Kenntnis Des Planktons Der Seen Griechenlands, III. Das Zooplankton Des Vengoritis Sees. *Folia Biochem. Biol. Graeca* **1976**, *13*, 67–90.
99. Zarfdjian, M.H.; Vranovský, M.; Economidis, P.S. Les Invertébrés Planctoniques du Lac Volvi (Macédoine, Grèce). The Planktonic Invertebrates of Lake Volvi (Macedonia, Greece). *Int. Rev. Gesamten Hydrobiol. Hydrogr.* **1990**, *75*, 403–412. [CrossRef]
100. Kleanthidis, P.K.; Sinis, A.I. Feeding Habits of the Macedonian Shad, *Alosa macedonica* (Vinciguerra, 1921) in Lake Volvi (Greece): Seasonal and Ontogenetic Changes. *Isr. J. Zool.* **2001**, *47*, 213–232. [CrossRef]
101. Stephanides, T. A Short Note on the Entomostraca of Lake Yliki (Likeri) and of Lake Marathon. *Prakt. Hell. Hydrobioligal Inst.* **1964**, *9*, 1–6.
102. Klossas, A. *A Study on the Hydrobiology of the Lake Kerkini Near Serres*, 1st ed.; Ministry of Agriculture: Athens, Greece, 1975; pp. 5–61.
103. Giapis, A.J. Ecology of the *Lepomis gibbosus* (L.). Kerkini Lake. Ph.D. Thesis, School of Foresty and Natural Enviroment, Aristotle University of Thessaloniki, Thessaloniki, Greece, 2003.
104. Kagalou, I.I.; Kosiori, A.; Leonardos, I.D. Assessing the Zooplankton Community and Environmental Factors in a Mediterranean Wetland. *Environ. Monit. Assess.* **2010**, *170*, 445–455. [CrossRef]
105. Zarfdjian, M.H.; Michaloudi, E.; Bobori, D.C.; Mourelatos, S. Zooplankton Abundance in the Aliakmon River, Greece. *Belg. J. Zool.* **2000**, *130*, 31–36.
106. Karaytug, S.; Boxshall, G.A. The *Paracyclops fimbriatus*-Complex (Copepoda, Cyclopoida): A Revision. *Zoosystema* **1998**, *20*, 563–602.
107. Brehm, V. Calanoide Kopepoden Und Cladoceren Aus Kreta. *Fragm. Balc.* **1955**, *17*, 149–155.
108. Pesce, G.L. Stygobiological Researches in Subterranean Waters of Lesbos (Greece) and Description of *Stygonitocrella petkovski* n. sp. *Fragm. Balc.* **1985**, *12*, 125–139.
109. Pesce, G.L.; Maggi, D. Cyclopides et Calanoïdes Des Eaux Phréatiques de La Grèce Méridionale et Insulaire (Crutacea : Copepoda). *Ecol. Mediterr.* **1981**, *7*, 163–182. [CrossRef]
110. Maggi, D.; Pesce, G.L. Cyclopides Des Eaux Souterraines Phréatiques de La Grèce Du Nord (Crustacea: Copepoda). In Proceedings of the 1r Symposium International sur la Zoogéographie et l'Ecologie de la Grèce et des Régions Avoisinantes, Athenes, Greece, April 1978.
111. Pesce, G.L.; Maggi, D.; Ciocca, A.; Argano, R. Biological Researches on the Subterranean Phreatic Waters of Northern Greece. In Proceedings of the 1r Symposium International sur la Zoogeographie et LECOLOGIE de la grece et des Regions Avoisinantes, Athenes, Greece, 1979.
112. Pesce, G.L. The Occurrence of *Metacyclops subdolus* Kiefer (Crustacea: Copepoda) in Subterranean Waters of Greece with Remarks on Its Systematic Status. *Int. J. Speleol.* **1978**, *10*, 179–183. [CrossRef]
113. Dodson, S. Species Richness of Crustacean Zooplankton in European Lakes of Different Sizes. *Int. Ver. Für Theor. Angew. Limnol. Verhandlungen* **1991**, *24*, 1223–1229. [CrossRef]
114. Kuczyńska-Kippen, N.; Špoljar, M.; Zhang, C.; Pronin, M. Zooplankton Functional Traits as a Tool to Assess Latitudinal Variation in the Northern-Southern Temperate European Regions during Spring and Autumn Seasons. *Ecol. Indic.* **2020**, *117*, 106629. [CrossRef]
115. Lapesa, S.; Snell, T.W.; Fields, D.M.; Serra, M. Selective Feeding of *Arctodiaptomus salinus* (Copepoda, Calanoida) on Co-Occurring Sibling Rotifer Species. *Freshw. Biol.* **2004**, *49*, 1053–1061. [CrossRef]
116. Brucet, S.; Compte, J.; Boix, D.; López-Flores, R.; Quintana, X.D. Feeding of Nauplii, Copepodites and Adults of *Calanipeda aquaedulcis* (Calanoida) in Mediterranean Salt Marshes. *Mar. Ecol. Prog. Ser.* **2008**, *355*, 183–191. [CrossRef]
117. Krztoń, W.; Kosiba, J. Variations in Zooplankton Functional Groups Density in Freshwater Ecosystems Exposed to Cyanobacterial Blooms. *Sci. Total Environ.* **2020**, *730*, 139044. [CrossRef]
118. Fryer, G. The Food of Some Freshwater Cyclopoid Copepods and Its Ecological Significance. *J. Anim. Ecol.* **1957**, *26*, 263–286. [CrossRef]
119. Rylov, V.M. *Fauna of the USSR. Crustaceans. Freshwater Cyclopoida*, 1st ed.; Nauka: Moscow, Russia, 1948; pp. 1–312. (In Russian)
120. Dussart, B. *Les Copépodes des Eaux Continentáles. II. Cyclopoides et Biologie*, 1st ed.; N. Boubee & Cie: Paris, France, 1969; pp. 1–292.

121. Dussart, B. *Les Copépodes des Eaux Continentáles. I. Calanoides et Harpacticoides*, 1st ed.; N. Boubee & Cie: Paris, France, 1967; pp. 1–500.
122. Sarvala, J. Effect of Temperature on the Duration of Egg, Nauplius and Copepodite Development of Some Freshwater Benthic Copepoda. *Freshw. Biol.* **1979**, *9*, 515–534. [CrossRef]
123. Sarvala, J. Ecology and Role of Benthic Copepods in Northern Lakes. *J. Mar. Syst.* **1998**, *15*, 75–86. [CrossRef]