

Peer-reviewed publications

- Lehtinen, S., Suikkanen, S., **Hällfors, H.**, Kauppila, P., Lehtiniemi, M., Tuimala, J., Uusitalo, L. & Kuosa, H. **2016**: Approach for supporting food web assessments with multi-decadal phytoplankton community analyses — case Baltic Sea. - *Front. Mar. Sci.* 3:220. doi: 10.3389/fmars.2016.00220
- Nygård, H., Oinonen, S., **Hällfors, H.A.**, Lehtiniemi, M., Rantajärvi, E. & Uusitalo, L. **2016**: Price vs. value of marine monitoring. - *Front. Mar. Sci.* 3:205. doi: 10.3389/fmars.2016.00205
- Hällfors, H.** 2013: Studies on dinoflagellates in the northern Baltic Sea. – Ph.D. Thesis, Faculty of Biological and Environmental Sciences, University of Helsinki. Walter and Andrée de Nottbeck Foundation Scientific Reports 39. 71 pp. + 4 papers.
- Hällfors, H.**, Backer, H., Leppänen, J.-M., Hällfors, S., Hällfors, G. & Kuosa, H. 2013: The northern Baltic Sea phytoplankton communities in 1903–1911 and 1993–2005: a comparison of historical and modern species data. – *Hydrobiologia* 707:109–133.
- Uusitalo, L., Fleming-Lehtinen, V., **Hällfors, H.**, Jaanus, A., Hällfors, S. & London, L. 2013: A novel approach for estimating phytoplankton biodiversity. – *ICES Journal of Marine Science* 70(2):408–417.
- Hällfors, H.**, Hajdu, S., Kuosa, H. & Larsson, U. 2011: Vertical and temporal distribution of the dinoflagellates *Dinophysis acuminata* and *D. norvegica* in the Baltic Sea. – *Boreal Environment Research* 16(2):121–135.
- Rintala, J.-M., **Hällfors, H.**, Hällfors, S., Hällfors, G., Majaneva, M. & Blomster, J. 2010: *Heterocapsa arctica* subsp. *frigida*, subsp. nov. (Peridinales, Dinophyceae) – description of a new dinoflagellate and its occurrence in the Baltic Sea. – *Journal of Phycology* 46(4):751–762.

Conference publications

- Hällfors, H.**, Backer, H., Leppänen, J.-M., Hällfors, S., Hällfors, G. & Kuosa H. 2011: The Baltic Sea phytoplankton community – a comparison of historical and modern data. – Plankton 2011, Plankton biodiversity and global change – Sir Alister Hardy Foundation for Ocean Science 80th Anniversary Symposium, 22.–23.9.2011, Plymouth, UK. Abstract publication.
- Hällfors, H.**, Backer, H., Leppänen, J.-M., Hällfors, S. & Hällfors, G. 2010: The Baltic Sea phytoplankton community at the beginning and end of the 20th century – a comparison of historical and modern species data. – 14th International Conference on Harmful Algae, Hersonissos, Crete, Greece 1–5 November 2010. Abstract book: p.75.
- Rintala, J.-M., **Hällfors, H.**, Hällfors, S., Hällfors, G., Majaneva, M. & Blomster, J. 2008: The geographical distribution and seasonal occurrence of a new peridinioid dinoflagellate in the Baltic Sea: *Heterocapsa arctica* ssp. *frigida*, ssp. nov. – 13th International Conference on Harmful Algae, Hong Kong, 3–7 November 2008. Programme and abstract: p. 45.
- Hällfors, H.**, Hajdu, S., Kuosa, H. & Larsson, U. 2006: Vertical distribution of two potentially toxic *Dinophysis* species (Dinophyceae) in the northern Baltic Sea. – 12th International Conference on Harmful Algae, Copenhagen, Denmark, 4–8 September 2006. Programme and abstracts: p. 184.
- Hällfors, H.** & Rantajärvi, E. 2003: Alg@line – 10 years of innovative phytoplankton monitoring and research in the Baltic Sea. – ASC Edition, ICES CM 2003 Documents, ICES Annual Science Conference and 91st Statutory Meeting, 24.–27.9.2003, Tallinn, Estonia. (CD-ROM).
- Ruokanen, L., Rantajärvi, E., **Hällfors, H.**, Fleming, V., Maunula, P. & Kaitala, S. 2003: Alg@line – Joint operational unattended phytoplankton monitoring system. – In: Bäck, S. et al. (eds.), Baltic Sea Science Congress 2003 Helsinki, Finland, August 24–28, 2003. Abstract publication: p. 230.

Examples of phytoplankton monitoring and/or taxonomy related output

- Lehtinen, S., **Hällfors, H.**, Kauppila, P., Kuosa, H., Lehtiniemi, M., Suikkanen, S. & Uusitalo, L. 2015: Phytoplankton community composition in relation to the pelagic food web in the open northern Baltic Sea. HELCOM Baltic Sea Environment Fact Sheets. Online. <http://www.helcom.fi/baltic-sea-trends/environment-fact-sheets/eutrophication/phytoplankton-community-composition/>

- Lehtinen, S., **Hällfors, H.**, Kauppila, P., Anttila, S., Kremp, A., Setälä, O., Fleming-Lehtinen, V., Kankaanpää, H., Junttila, S., Attila, J., Knuutila, S. & Kaitala, S. 2015: Kasviplanktonin määrä kertoo rehevöitymisen asteesta. – In: Rantajärvi, E. & Karjala, L. (eds.), Meren pärskäys 2015: Sukellus Itämeren hoitoon ja tilaan: 94-108. Suomen ympäristökeskuksen raportteja 21. <https://helda.helsinki.fi/handle/10138/155227>
- Uusitalo, L., Fleming-Lehtinen, V., **Hällfors, H.**, Jaanus, A., London, L., Hällfors, S. 2015. Phytoplankton taxonomic diversity (Shannon95). – In: Martin, G. et al. (eds.), The MARMONI approach to marine biodiversity indicators. Volume II: List of indicators for assessing the state of marine biodiversity in the Baltic Sea developed by the LIFE MARMONI project. P. 91-95. Estonian Marine Institute Report Series 16. Online. http://marmoni.balticseaportal.net/wp/wp-content/uploads/2011/03/A2_REPORT_INDICATORS_VOLUME-II.pdf
- Hällfors, S. & **Hällfors, H.** 2013: Pohjoisen Itämeren kasviplankton. Painopiste taksoneissa jotka esiintyvät yleisinä avoimella pohjoisella varsinaisella Itämerellä ja Suomenlahdella. – Helsingin yliopiston kurssimoniste. 5 pp. + 95 Plates.
- Hällfors, H.** & Uusitalo, L. 2013: Early warning indicators: phytoplankton. – In: Uusitalo, L., **Hällfors, H.**, Peltonen, H., Kiljunen, M., Jounela, P. & Aro, E. 2013: Indicators of the Good Environmental Status of food webs in the Baltic Sea. – GES-REG project, WP3, 83 pp. Online. <http://gesreg.msi.ttu.ee/en/results>, see file “WP3 GES-REG D4 Food webs final report.pdf”.
- Uusitalo, L., **Hällfors, H.**, Peltonen, H., Kiljunen, M., Jounela, P. & Aro, E. 2013: Indicators of the Good Environmental Status of food webs in the Baltic Sea. – GES-REG project, WP3, 83 pp. Online. <http://gesreg.msi.ttu.ee/en/results>, see file “WP3 GES-REG D4 Food webs final report.pdf”.
- Vahtera, E., **Hällfors, H.**, Muurinen, J., Pääkkönen, J.-P. & Räsänen, M. 2013: Helsingin ja Espoon merialueen tila vuonna 2012. Jätevesien vaikutusten velvoitetarkkailu. – Helsingin kaupungin ympäristökeskuksen julkaisuja 8/2013. 90 pp. + 4 appendices. [Havsområdet tillstånd inom Helsingfors och Esbo år 2012. Den ålagda övervakningen av avloppsvattens inverkningsar.] Available at http://www.hel.fi/wps/wcm/connect/d8eba0a5-bcf2-4ea3-86ab-7ccf47f4d095/julkaisu_08_13_net.pdf?MOD=AJPERES
- HELCOM (*Editors:* Korpinen, S. & Zweifel, U.L.; *authors* Antsulevich, A., Appelberg, M., Baršienė, J., Bignert, A., Boalt, E., Braeger, S., Broeg, K., Bäcklin, B.-M., Connor, D., Dabrowska, H., Fleming-Lehtinen, V., Fürhaupter, K., Galatius, A., Garnaga, G., Gorokhova, E., Green, M., Haarich, M., **Hällfors, H.**, Hario, M., Hedman, J., Heikinheimo, O., Helander, B., Herrmann, C., Herrmann, J., Härkönen, T., Isomursu, M., Kammann, U., Kanisch, G., Kunnasranta, M., Lang, T., Lappalainen, A., Larsen, M.M., Lehtiniemi, M., Lehtonen, K., Mannio, J., Meidinger, M., Michalek, M., Moraeus, C., Nielsen, S.P., Olsson, J., Poikane, R., Ranft, S., Rolke, M., Romakkaniemi, A., Ruden, C., Ruuskanen, A., Schneider, R., Schiedek, D., Skov, H., Strand, J. Sundelin, B., Uusitalo, L., Werner M. & Werner, S.) 2012: Development of a set of core indicators: Interim report of the HELCOM CORESET project, PART B: Descriptions of the indicators. – Baltic Sea Environment Proceedings 129B. 219 pp. Online <http://www.helcom.fi/Lists/Publications/BSEP129B.pdf>
- Hällfors, H.**, Leppänen, J.-M., Hällfors, S., Backer, H., & Hällfors, G. 2007: Changes in the phytoplankton community from 1903-1911 to 1993-2005 in the northern Baltic Sea - a comparison of historical and modern species data. - In: Kuuppo, P. (ed.), HELCOM MONAS 10/2007, A proposal for phytoplankton indicators for the use of HELCOM EUTRO-PRO and HELCOM BIO, Annex 2.
- Backer, H., **Hällfors, H.**, Leppänen, J.-M., Paulomäki, H. & Pyhälä, M. (eds.) 2007: Towards a favourable status of Baltic Sea Biodiversity. – Draft HELCOM overview 2007, 2nd Stakeholder Conference on the HELCOM Baltic Sea Action Plan, Helsinki, Finland, 6 March 2007. 29 pp. Online. http://www.helcom.fi/stc/files/BSAP/Biodiversity_draft%20overview%202007-2.pdf [no longer available online]
- Kaitala, S., Laamanen, M., Hällfors, S. & **Hällfors, H.** 2005: Cyanobacteria bloom index. – HELCOM Indicator Fact Sheets 2005. Online. http://www.helcom.fi/environment2/ifs/archive/ifs2005/en_GB/bloom_index/ [no longer available online]
- Kaitala, S., Laamanen, M., Hällfors, S. & **Hällfors, H.** 2004: Cyanobacteria bloom index. – HELCOM Indicator Fact Sheets 2004. Online. <http://www.helcom.fi/environment2/ifs/archive/ifs2004/cyanobacteriaindex/> [no longer available online]
- Ruokanen, L., **Hällfors, H.** & Rantajärvi, E., 2003: Phytoplankton biomass and species succession in the Gulf of Finland, Northern Baltic Proper and Arkona Basin in 2003. – HELCOM Indicator Fact Sheets 2003. Online. http://www.helcom.fi/environment2/ifs/archive/ifs2003/en_GB/succession/ [no longer available online]
- Hällfors, H.** 2002, 2003, 2006, 2008: Species reports June 2002; April-September, November-December 2003; July 2006; June-July 2008. – Finnish Institute of Marine Research Species Reports. Online.

http://www.itameriportaali.fi/fi/tietoa/itameren_tila/algaline/lajistoraportit/lajistoraporttiarkisto/fi_FI/lajistoraporttiarkisto/

http://www.itameriportaali.fi/fi/tietoa/itameren_tila/algaline/lajistoraportit/lajistoraporttiarkisto/fi_FI/lajistoraporttiarkisto/ [listaus/](#) [no longer available online]

Examples of other output

- Berg, T., Aylagas, E., Balsby T.J.S. Borja, A., Bučas, M., Capuzzo, E. Carstensen, J., Chenuil, A., Clausen, P., Doncheva, V., Ferrera, I., Garcés, E., **Hällfors, H.**, Heiskanen, A.-S., Kauppila, P., Krause-Jensen, D., Kuosa, H., Lehtinen, S., Lehtiniemi, M., Lynam, C., Olenin, S., Moncheva, S., Muxika, I., Papadopoulou, N., Reñé, A., Naiara-Rodríguez-Ezpeleta, Rossberg, A., Stefanova, K., Suikkanen, S., Teixeira, H., Uusitalo L., Uyarra, M.C., Zaiko, A. & Zenetos, A. 2016: Report on the new indicators and methods for setting reference and methods for and target values target values. – DEVOTES Project Deliverable 3.3, WP 3. 263 pp. Online. <http://www.devotes-project.eu/deliverables-and-milestones/>
- Fammler, H., Wijkmark, N., Lappalainen, A., **Hällfors, H.**, Martin, G., Aunins, A., Nilsson, L., Bojārs, E., Veidemane, K. & Ruskule, A. 2015: MARMONI activities and results in brief. Innovative approaches for marine biodiversity monitoring and assessment of conservation status of nature values in the Baltic Sea. – MARMONI project report. 16 pp. Available at http://marmoni.balticseaportal.net/wp/wp-content/uploads/2011/03/Marmoni-activitiesresults_19.01.2015_FINAL.pdf
- Martin, G., Fammler, H., Veidemane, K., Wijkmark, N., Auniņš, A., **Hällfors, H.** & Lappalainen, A. (eds.) 2015: The MARMONI approach to marine biodiversity indicators. Volume I: Development of indicators for assessing the state of marine biodiversity in the Baltic Sea within the LIFE MARMONI project. – Estonian Marine Institute Report Series, No. 16, Vol. I, 79 pp. + memory stick appendix. Available at http://marmoni.balticseaportal.net/wp/wp-content/uploads/2011/03/MARMONI_VOLUME-I_reduced.pdf
- Martin, G., Fammler, H., Veidemane, K., Wijkmark, N., Auniņš, A., **Hällfors, H.** & Lappalainen, A. (eds.) 2015: The MARMONI approach to marine biodiversity indicators. Volume II: List of indicators for assessing the state of marine biodiversity in the Baltic Sea developed by the LIFE MARMONI project, pp. 84-90. - Estonian Marine Institute Report Series, No. 16, Vol. II, 166 pp. Online. http://marmoni.balticseaportal.net/wp/wp-content/uploads/2011/03/A2_REPORT_INDICATORS_VOLUME-II.pdf
- Rantajärvi, E., Lappalainen, A., **Hällfors, H.** 2015. Uusia työkaluja Itämeren tilan arviointiin. – Ympäristö 29(5):16-19.
- Ruskule, A., Aigars, J., Martin, G., **Hällfors, H.**, Korpinen, S., Lehtiniemi, M., Nygård, H., Lappalainen, A., Wijkmark, N., Porsbring, T. & Auniņš, A. 2015: MARMONI recommendations to the national marine monitoring programmes of Latvia, Estonia, Finland and Sweden. – MARMONI project report. 29 pp. Online. http://marmoni.balticseaportal.net/wp/wp-content/uploads/2011/03/Annex-7.2.23_Recommendations-to-national-monitoring-programmes.pdf
- Ruskule, A., Aigars, J., Grandāne, M., **Hällfors, H.**, Korpinen, S., Lehtiniemi, M., Nygård, H., Lappalainen, A., Ogonowski, M., Näslund, J., Fyhr, F., Isaeus, M., Porsbring, T., Kuris, M. & Martin, G. 2015: MARMONI recommendations to the national marine protection policies of Latvia, Estonia, Finland and Sweden. – MARMONI project report. 38 pp. Online. http://marmoni.balticseaportal.net/wp/wp-content/uploads/2011/03/Annex-7.2.24_Recommendations-to-marine-protection-policies.pdf
- Veidemane, K., Pakalniete, K., Strake, S., Jermakovs, V., Aunins, A., Stipniece, A., **Hällfors, H.**, Lehtiniemi, M., Nygård, H., Salojärvi, J., Ogonowski, M., Wijkmark, N. & Isaeus, M. 2015: Socio-economic assessment of indicator-based marine biodiversity monitoring programmes and methods. – MARMONI project report. 70 pp. Online. http://marmoni.balticseaportal.net/wp/wp-content/uploads/2011/03/Annex-7.2.19_Socio-economic-assessment-of-indicator-based-marine-biodiversity-monitoring-programmes-and-methods.pdf
- Wijkmark, N. (ed.), Ahlman, M., Alberte, M. Anttila, S., Attila, J., Auniņš, A., Bärda, I., Didrikas, T., Annely, E., Gatis, E., Fernandes, J.A., Fleming-Lehtinen, V., Hallberg, O., Hedvall, T., Herkül, K., **Hällfors, H.**, Jermakovs, V., Jurgensone, I., Isaeus, M., Jaale, M., Jaanus, A., Jakovels, D., Junttila, S., Kaljurand, K., Kalso, M., Kiiskinen, S., Korpinen, S., Kotta, J., Krüze, E., Kuprijanov, I., Kuresoo, A., Lehtinen, S., Lehtiniemi, M., Luigujõe, L., Martin, G., Maunula, P., Minde, A., Nilsson, L., Nygård, H., Näslund, J., Oja, J., Philipson, P., Puriņa, I., Rostin, L., Rousi, H., Ruuskanen, A., Staveley, T., Saks, L., Simis, S., Sträke, S., Strömbäck, N., Sundblad, G., Tasala, S., Taskovs, J., Torn, K., Uusitalo, L., Wijkmark, N. 2014: Field, laboratory and experimental work within the MARMONI project – Report on survey results and obtained data. – MARMONI project report. 242 pp. Online. http://www.aquabiota.se/wp-content/uploads/A3_REPORT_Survey_Results.pdf

- Auniņš, A., Alberte, M., **Hällfors, H.**, Herkül, K., Jüssi, I., Karvinen, V., Krūze, E., Kuresoo, A.†, Lappalainen, A., Luigujõe, L., Martin, G., Nilsson, L., Oganjan, K., Saks, L., Strāķe, S., Verliin, A., Wijkmark, N. 2014: Assessment of the conservation status of species and habitats of community importance. – In: Auniņš, A. & Martin, G. (eds), Biodiversity assessment of MARMONI project areas. MARMONI project report. 175 pp. Online. http://marmoni.balticseaportal.net/wp/wp-content/uploads/2011/03/Biodiversity-assessment-report_24.03.2015.pdf
- Martin, G., Torn, K., Fleming-Lehtinen, V., **Hällfors, H.**, Isaeus, M., Korpinen, S. Lappalainen, A., Lehtiniemi, M., Nilsson, L., Nygård, H., Nyström Sandman, A., Wijkmark, N. 2014: Integrated biodiversity assessment. – In: Auniņš, A. & Martin, G. (eds), Biodiversity assessment of MARMONI project areas. MARMONI project report. 175 pp. Online. http://marmoni.balticseaportal.net/wp/wp-content/uploads/2011/03/Biodiversity-assessment-report_24.03.2015.pdf
- Auniņš, A., Ruskule, A., Ikauniece, A., Eriņš, G., Urtāns, A., Martin, G., Jüssi, I., Kuresoo, A., Kuris, M., Fleming-Lehtinen, V., **Hällfors, H.**, Lappalainen, A., Wijkmark, N. 2013: Methodological guidelines for the demonstration of the biodiversity assessment. MARMONI project report. 65 pp. Online. <http://marmoni.balticseaportal.net/wp/wp-content/uploads/2011/03/Methodological-guidelines.pdf>
- Huhtala, A., Ahtiainen, H., Ekholm, P., Fleming-Lehtinen, V., Heikkilä, J., Heiskanen, A-S., Helin, J., Helle, I., Hyytiäinen, K., **Hällfors, H.**, Iho, A., Koikkalainen, K., Kuikka, S., Lehtiniemi, M., Mannio, J., Mehtonen, J., Miettinen, A., Mäntyniemi, S., Peltonen, H., Pouta, E., Pykkö, M., Salmiovirta, M., Verta, M., Vesterinen, J., Viitasalo, M., Viitasalo-Frösen, S., Väisänen, S. 2009: The economics of the state of the Baltic Sea: pre-study assessing the feasibility of a cost-benefit analysis of protecting the Baltic Sea ecosystem. – Sektoritutkimuksen neuvottelukunnan julkaisuja 2-2009. 170 pp. Online. http://www.minedu.fi/export/sites/default/OPM/Tiede/setu/liitteet/Setu_2-2009.pdf [no longer available online]