
PATRICIA HOLM PUBLICATIONS

PROF. DR. RER. NAT. / PROFESSOR OF ECOLOGY

HEAD OF THE PROGRAM “MAN – SOCIETY - ENVIRONMENT” (MGU)

Since 2003

Department of Environmental Sciences, University of Basel, Switzerland

CONTACT DETAILS

University of Basel
Vesalgasse 1
CH-4051 Basel
Switzerland

patricia.holm@unibas.ch

Tel Secr. +41 61 207 04 00
Tel direct +41 61 207 04 02
Skype ID: patricia.holm I

WEBSITES

<https://mgu.unibas.ch>
[https://mgu.unibas.ch/en/team/
patricia-burkhardt-holm](https://mgu.unibas.ch/en/team/patricia-burkhardt-holm)

PRIVATE ADDRESS

Dullikerstrasse 5
CH-4656 Starrkirch-Wil
+41 79 640 02 70

PUBLICATIONS



PEER-REVIEWED JOURNAL ARTICLES

1. Govindasamy, N., N., Rauter, G., Seidel, F., **Burkhardt-Holm, P.**, Hirsch, P.E., Wiegleb, J., 2024. Does swimming at the bottom serve as a hydraulic advantage for benthic fish *Neogobius melanostomus* Pallas (1814) in flowing water? *Biology Open* 2024/Vol. 13. doi.org/10.1242/bio.060533
2. Plön, S., Andra, K., Auditore, L., Gegout, C., Hale, P.J., Hampe, O., Ramilo-Henry, M., **Burkhardt-Holm, P.**, Jaigirdar, A.M., Klein, L., Maewashe, M.K., Müssig, J., Ramsarup, N., Roussouw, N., Sabin, R., Shongwe, T.C., Tuddenham, P. 2024. Marine mammals as indicators of Anthropocene Ocean Health. *npj biodiversity* 3/2024. doi.org/10.1038/s44185-024-00055-5
3. Leuenberger, K., Erni-Cassola, G., Leistenschneider, C., **Burkhardt-Holm, P.**, 2024. Microplastic ingestion in five demersal, bathydemersal and bathypelagic fish species from the eastern Weddell Sea, Antarctica. *Elsevier* 2024/Vol. 946. https://doi.org/10.1016/j.scitotenv.2024.174320
4. Leistenschneider, C., Wu, F., Primpke, S., Gerdts, G., **Burkhardt-Holm, P.**, 2024. Unveiling high concentrations of small microplastics (11–500 µm) in surface water samples from the southern Weddell Sea off Antarctica. doi.org/10.1016/j.scitotenv.2024.172124

5. Erni-Cassola, G., Dolf, R., **Burkhardt-Holm, P.**, 2024. Microplastics in the Water Column of the Rhine River Near Basel: 22 Months of Sampling. *Environ. Sci.* 2024. doi.org/10.1021/acs.est.3c08364
6. Erni-Cassola, G., Ebner, J.N., Blattner, L.A., **Burkhardt-Holm, P.**, 2023. Microplastics in river sediment: Chronic exposure of the amphipod *Gammarus fossarum* to polyethylene terephthalate in a microcosm. *Elsevier* 2024/Vol. 463. doi.org/10.1016/j.jhazmat.2023.132874
7. Hanninger, E.-M., Selling, J., Heyer, K., **Burkhardt-Holm, P.**, 2023. Injuries in cetaceans in the Strait of Gibraltar: an update for the period 2016-2020. doi.org/10.47536/jcrm.v24i1.397
8. Hanninger, E.-M., Selling, J., Heyer, K., **Burkhardt-Holm, P.**, 2023. Skin conditions, epizoa, ectoparasites and emaciation in cetaceans in the Strait of Gibraltar: An update for the period 2016–2020. *Cetacean Research Management.* 2023/Vol. 24. doi.org/10.47536/jcrm.v24i1
9. Wiegleb, J., Hirsch, Ph. E., Seidel, F., Rauter, G., **Burkhardt-Holm, P.**, 2023. Round goby [*Neogobius melanostomus* (Pallas, 1814)], gudgeon (*Gobio gobio* L.) and bullhead (*Cottus gobio* L.) show distinct swimming patterns in a vertical slot fish pass. *Front. Environ. Sci.* 2023. doi.org/10.3389/fenvs.2023.1156248
10. Wiegleb, J., Hirsch, Ph. E., Seidel, F., Rauter, G., **Burkhardt-Holm, P.**, 2022. Impact of hydraulic forces on the passage of round goby (*Neogobius melanostomus*), gudgeon (*Gobio gobio*) and bullhead (*Cottus gobio*) in a vertical slot fish pass. *Ecology of Freshwater Fish* 2022. doi: 10.1111/effl.2696.
11. Leistenschneider, C., Le Bohec, C., Eisen, O., Houstin, A., Neff, S., Primpke, S., Zitterbart, D.P., **Burkhardt-Holm, P.**, Gerdts, G., 2022. No evidence of microplastic ingestion in emperor penguin chicks (*Aptenodytes forsteri*) from the Atka Bay colony (Dronning Maud Land, Antarctica). *STOTEN* 2022, 851 Part 2, doi: 10.1016/j.scitotenv.2022.158314.
12. Bussmann, K., Hirsch, Ph.E., Lehmann, M.F., **Burkhardt-Holm, P.**, 2022. Differential habitat use of a notorious invasive fish, the round goby, in a translocation-relevant system. *Ecology and Evolution* 2022:12:e9202. doi: 10.1002/ece3.9202.
13. Bussmann, K., Hirsch, Ph.E., **Burkhardt-Holm, P.**, 2022. Invasive goby larvae: first evidence as stowaways in small watercraft motors. *Management of Biological Invasions* (2022) 13 (1), 191–203. doi: 10.3391/mbi.2022.13.1.11.
14. Purser, A., Hehemann, L., Boehringer, L., Tippenhauer, S., Wege, M., Bornemann, H., Pineda-Metz, S.E.A., Flintrop, C.M., Koch, F., Hellmer, H.H., **Burkhardt-Holm, P.**, Janout, M., Werner, E., Glemser, B., Balaguer, J., Rogge, A., Holtappels, M., Wenzhoefer, F. 2022. A vast icefish breeding colony discovered in the Antarctic. *Current Biology.* doi:10.1016/j.cub.2021.12.022.

15. Strobel, A., Lille-Langøy, R., Segner, H., **Burkhardt-Holm, P.**, Goksøyr, A., Odd, A.K. 2021. Xenobiotic metabolism and its physiological consequences in high-Antarctic Notothenioid fishes. *Polar Biology*. doi: 10.1007/s00300-021-02992-4.
16. Wiegleb, J., Hirsch, Ph.E., Seidel, F., Rauter, G., **Burkhardt-Holm, P.**, 2021. Flow, force, behaviour: assessment of a prototype hydraulic barrier for invasive fish. *Hydrobiologia* (2022) 849, 1001–1019. doi: 10.1007/s10750-021-04762-z.
17. Leistenschneider, C., **Burkhardt-Holm, P.**, Mani, T., Primpke, S., Taubner, H., Gerdts, G. 2021. Microplastics in the Weddell Sea (Antarctica): A Forensic Approach for Discrimination between Environmental and Vessel-Induced Microplastics. *Environ. Sci. Technol.* 55, 23, 15900–15911. doi: 10.1021/acs.est.1c05207 (most read).
18. Paler, M.K.O., Leistenschneider, C., Migo, C., **Burkhardt-Holm, P.** 2021. Low microplastic abundance in *Siganus* spp. from the Tañon Strait, Central Philippines. *Environmental Pollution*, 284, 117166. doi: 10.1016/j.envpol.2021.117166
19. Yong M.M.H., Leistenschneider C., Miranda J.A., Paler M.K., Legaspi C., Germanov E., Araujo G., **Burkhardt-Holm, P.**, Erni-Cassola G. 2021. Microplastics in fecal samples of whale sharks (*Rhincodon typus*) and from surface water in the Philippines. *Micropastics and Nanoplastics*, 1, 17. doi: 10.1186/s43591-021-00017-9
20. Hirsch, P.E.; N'Guyen, A.; **Burkhardt-Holm, P.** 2021. Hobbyists acting simultaneously as anglers and aquarists: Novel pathways for non-native fish and impacts on native fish. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 31, 6, 1285-1296, doi: 10.1002/aqc.3557.
21. Egger, B., Wiegleb, J., Seidel, F., **Burkhardt-Holm, P.**, Hirsch, P.E. 2020. Comparative swimming performance and behaviour of three benthic fish species: The invasive round goby (*Neogobius melanostomus*), the native bullhead (*Cottus gobio*), and the native gudgeon (*Gobio gobio*). *Ecology of freshwater fish*. 30 (3), 391-405. doi:10.1111/eff.12592.
22. Bosshart, S., Erni-Cassola, G., **Burkhardt-Holm, P.** 2020. Independence of microplastic ingestion from environmental load in the round goby (*Neogobius melanostomus*) from the Rhine river using high quality standards. *Environmental Pollution*, 267, 115664.
23. Wiegleb, J., Hirsch, P.E., Egger, B., Seidel, F., **Burkhardt-Holm, P.** 2020. Flow field-induced drag forces and swimming behavior of three benthic fish species. *Limnologica*. 84, 125812.
24. Bussmann, K, **Burkhardt-Holm, P.** 2020. Round gobies in the third dimension – use of vertical walls as habitat enables vector contact in a bottom-dwelling invasive fish. *Aquatic Invasions* 15. 683-699.
25. Unger, B., Herr, H., Viquerat, S., Gilles, A., **Burkhardt-Holm, P.**, Siebert, U. 2020. Opportunistically collected data from aerial surveys reveal spatio-temporal distribution patterns of marine debris in German waters. *Environmental Science and Pollution Research international* 28, 2893-2903.

26. Lutz, E. , Hirsch, P.E. , Bussmann, K. , Wiegleb, J., Jermann, H-P., Muller, R., **Burkhardt-Holm, P.**, Adrian-Kalchhauser, I. 2020. Predation on native fish eggs by invasive round goby revealed by species-specific gut content DNA analyses. *Aquatic Conservation 30: Marine and Freshwater Ecosystems*, 1566-1577.
27. Herr, H., **Burkhardt-Holm, P.**, Heyer, K., Siebert, U., Selling, J. 2020. Injuries, Malformations, and Epidermal Conditions in Cetaceans of the Strait of Gibraltar. *Aquatic Mammals*, 46 (2), 215-235.
28. Mani, T., **Burkhardt-Holm, P.** 2019. Seasonal microplastics variation in nival and pluvial stretches of the Rhine River – From the Swiss catchment towards the North Sea. *Science of The Total Environment*, 135579.
29. Ruesch Schweizer, C., Di Giulio, A., **Burkhardt-Holm, P.** 2019. Scientific Support for Redesigning a Higher-Education Curriculum on Sustainability. *Sustainability 11*, 6035.
30. Di Giulio, A., Ruesch Schweizer, C., Defila, R., Hirsch, P., **Burkhardt-Holm, P.** 2019. "These Grandmas Drove Me Mad. It Was Brilliant!" - Promising Starting Points to Support Citizen Competence for Sustainable Consumption in Adults. *Sustainability 11*, 681.
31. **Burkhardt-Holm, P.**, N'Guyen, A. 2019. Ingestion of microplastics by fish and other prey organisms of cetaceans, exemplified for two large baleen whale species. *Marine Pollution Bulletin*, 144, 224-234.
32. Mani, T., Primpke, S., Lorenz, C., Gerdts, G., **Burkhardt-Holm, P.** 2019. Microplastic Pollution in Benthic Midstream Sediments of the Rhine River. *Environ. Sci. Technol.*, 53, 6053–6062.
33. Mani, T., Blarer, P., Storck, F.R., Pittroff, M. , Wernicke, T., **Burkhardt-Holm, P.** 2019. Repeated detection of polystyrene microbeads in the Lower Rhine River. *Environmental Pollution*, 245, 634-641.
34. Mani, T.; Frehland, S.; Kalberer, A.; **Burkhardt-Holm, P.** 2019. Using castor oil to separate microplastics from four different environmental matrices. *Analytical Methods*, 11 (13), 1788-1794.
35. Somerville, V.; Schwaiger, M.; Hirsch, P. E; Walser, J.; Bussmann, K.; Weyrich, A.; **Burkhardt-Holm, P.**; Adrian-Kalchhauser, I. 2019. DNA Methylation Patterns in the Round Goby Hypothalamus Support an On-The-Spot Decision Scenario for Territorial Behavior. *Genes*. 10 (3), 1-22.
36. Adrian-Kalchhauser, I.; Walser, J.; Schwaiger, M.; **Burkhardt-Holm, P.** 2018. RNA sequencing of early round goby embryos reveals that maternal experiences can shape the maternal RNA contribution in a wild vertebrate. *BMC Evolutionary Biology*, 18 (1), 34.
37. **Burkhardt-Holm, P.**; Zehnder, A.J.B. 2018. Fischnetz: Assessing outcomes and impacts of a project at the interface of science and public policy. *Environmental Science & Policy*, 82, 52-59.

38. Hirsch, P. E.; N'Guyen, A.; Muller, R.; Adrian-Kalchhauser, I.; **Burkhardt-Holm, P.** 2018. Colonizing islands of water on dry land - on the passive dispersal of fish eggs by birds. *Fish and Fisheries*, 19(3), 502-510.
39. N'Guyen, A.; Hirsch, P. E.; Bozzuto, C.; Adrian-Kalchhauser, I.; Hórková, K.; **Burkhardt-Holm, P.**; Zenni, R. 2018. A dynamical model for invasive round goby populations reveals efficient and effective management options. *Journal of Applied Ecology*, 55 (1), 342-352.
40. Strobel, A., Mark, F., Segner, H., **Burkhardt-Holm, P.** 2018. Expression of aryl hydrocarbon receptor-regulated genes and superoxide-dismutase in the Antarctic eelpout *Pachycara brachycephalum* exposed to Benzo(a)pyrene. *Environmental Toxicology and Chemistry*, 37 (5) 1487- 1495.
41. Strobel, A., Schmid, P., **Burkhardt-Holm, P.** , Segner, H., 2018, Zennegg, M. 2018. Persistent organic pollutants in red- and white-blooded High-Antarctic notothenioid fish from the remote Weddell Sea. *Chemosphere*. 193, 213 – 222.
42. Unger, B., Herr, H., Benke, H., Böhmert, M., **Burkhardt-Holm, P.**, Dähne, M., Hillmann, M., Wolff- Schmidt, K., Wohlsein, P., Siebert, U. 2017. Marine debris in harbor porpoises and seals from German water. *Marine Environmental Research*, 130: 77-84.
43. Adrian-Kalchhauser, I., N'Guyen, A., Hirsch, P.E., **Burkhardt-Holm, P.** The invasive round goby may attach its eggs to ships or boats –but there is no evidence. 2017. *Aquatic Invasions*, 12 (2): 263–267.
44. Galetti Vernazzani, B., **Burkhardt-Holm, P.**, Cabrera, E., Iniguez, M., Luna, F., Parsons, E.C.M., Ritter, F., Rodriguez-Fonseca, J., Sironi, M., Stachowitsch, M. 2017: Management and conservation at the International Whaling Commission: a dichotomy sandwiched within a shifting baseline. *Marine Policy* 83, 164 – 171
45. Straub, S., Hirsch, P.E., **Burkhardt-Holm, P.**, 2017. Biodegradable and petroleum-based microplastics do not differ in their ingestion and excretion but in their biological effects in a freshwater invertebrate *Gammarus fossarum*. *International Journal of Environmental Research and Public Health* 14: 774.
46. Adrian-Kalchhauser, I., Svensson, O., Kutschera, V.E., Rosenblad, M.A., Pippel, M., Winkler, S., Schloissnig, S., Blomberg, A., **Burkhardt-Holm, P.** 2017. The mitochondrial genome sequences of the round goby and the sand goby reveal patterns of recent evolution in gobiid fish; *BMC Genomics*, 18:177.
47. Hirsch, P., Thorlacius, M., Brodin, T., **Burkhardt-Holm, P.** 2017. An approach to incorporate individual personality in modelling fish dispersal across in-stream barriers. *Ecology and Evolution*, 7 (2): 720-732.
48. Hirsch, P.E., Schillinger, M., Appolini, K., **Burkhardt-Holm, P.**, Weigt, H. 2016. Integrating economic and ecological benchmarking for sustainable development of hydropower. *Sustainability* 8 (9): 875.

49. Hirsch, P.E., N'Guyen, A., Adrian-Kalchhauser, I., **Burkhardt-Holm, P.** 2016. What do we really know about the impacts of one of the 100 worst invaders in Europe? A reality check. *AMBIO* 45 (3): 267-279.
50. **Holm, P.**, Holm, F.J., Holm, J. 2016. Jagen – beobachten – vergöttern: Wal und Mensch. *Biologie in unserer Zeit* 46: 300-307.
51. Strobel, A., Schmid, P., Segner, H., **Burkhardt-Holm, P.**, Zennegg, M. 2016. Persistent organic pollutants in tissues of the white-blooded Antarctic fish *Champsocephalus gunnari* and *Chaenocephalus aceratus*. *Chemosphere* 161: 555-562.
52. Blarer, P., **Burkhardt-Holm, P.** 2016. Microplastics affect assimilation efficiency in freshwater amphipod *Gammarus fossarum*. *Environmental Science and Pollution Research* 23 (23): 23522–23532.
53. Adrian-Kalchhauser, I., Hirsch, P.E., Behrmann-Godel, J., N'Guyen, A., Watzlawczyk, J., Gertzen, S., Borcharding, J., **Burkhardt-Holm, P.** 2016. The invasive bighead goby *Ponticola kessleri* displays large-scale genetic similarities and small-scale genetic differentiation in relation to shipping patterns. *Molecular Ecology*. 25 (9): 1925-1943.
54. Hirsch, P.E., **Burkhardt-Holm, P.**, Töpfer, I., Fischer, P. 2016. Movement patterns and shelter choice of spiny-cheek crayfish (*Orconectes limosus*) in a large lake's littoral zone. *Aquatic Invasions* 10 (1): 55-65.
55. Hirsch, P.E., Adrian-Kalchhauser, I., Flämig, S., N'Guyen, A., Defila, R., Di Giulio, A., **Burkhardt-Holm, P.** 2016. A tough egg to crack: recreational boats as vectors for invasive goby eggs and transdisciplinary management approaches. *Ecology and Evolution* 6 (3): 707-715.
56. Adrian-Kalchhauser, I., **Burkhardt-Holm, P.** 2016. An eDNA assay to monitor a globally invasive fish species from flowing freshwater. *PLOS ONE* 11 (1): e0147558.
57. Kalchhauser, I., Kutschera, V.E., **Burkhardt-Holm, P.** 2016. The complete mitochondrial genome of the invasive Ponto-Caspian goby *Ponticola kessleri* obtained from high-throughput sequencing using the Ion Torrent Personal Genome Machine. *Mitochondrial DNA Part A* 27 (3): 1887-1889.
58. Glaus, K., Kalchhauser, I., **Burkhardt-Holm, P.**, White, W., Brunnschweiler, J. 2015. Characteristics of the shark fisheries of Fiji. *Scientific Reports* 5: 17556.
59. N'Guyen, A., Hirsch, P., Adrian-Kalchhauser, I., **Burkhardt-Holm, P.**, 2015. Improving invasive species management by integrating priorities and contributions of scientists and decision makers. *Ambio* (45), 3, 280-9
60. Mani, T., Hauk, A., Walter, U., **Burkhardt-Holm, P.** 2015. Microplastics profile along the Rhine River. *Scientific Reports* 5: 17988.
61. Pietsch, C., Kersten, S., Valenta, H., Dänicke, S., Schulz, C., **Burkhardt-Holm, P.**, Junge, R. 2015. Effects of dietary exposure to zearalenone (ZEN) on carp (*Cyprinus carpio* L.). *Toxins* 7: 3465-3480.

62. Pietsch, C., Katzenback, B., Garcia-Garcia, E., Schulz, C., Belosevic, M., **Burkhardt-Holm, P.** 2015. Acute and subchronic effects on immune responses of carp (*Cyprinus carpio* L.) after exposure to deoxynivalenol (DON) in feed. *Mycotoxin Research* 31: 151-164.
63. Strobel, A., **Burkhardt-Holm, P.**, Schmid, P., Segner, H. 2015. Benzo(a)pyrene Metabolism and EROD and GST Biotransformation Activity in the Liver of Red- and White-Blooded Antarctic Fish. *Environmental Science and Technology* 49: 8022-8032.
64. Pietsch, C., Junge, R., **Burkhardt-Holm, P.** 2015. Immunomodulation by Zearalenone in Carp (*Cyprinus carpio* L.). *BioMed Research International*: 420702, 9pp.
65. Pietsch, C., **Burkhardt-Holm, P.** 2015. Feed-borne exposure to deoxynivalenol leads to acute and chronic effects on liver enzymes and histology in carp. *World Mycotoxin Journal* 8 (5): 619-627.
66. Reichenbach, M., Bruppacher, S., **Holm, P.** 2015. Veränderte Bewertung von Pedelecs nach einer Testerfahrung. Unterschiede zwischen Mobilitätstypen und Wegezwecken am Beispiel der Basler Energy Tours. *Umweltpsychologie* 1: 79-98.
67. Wilmsmeier, L., **Holm, P.** 2015. Instream Revitalisierung – eine geeignete Massnahme zur Aufwertung von Fließgewässern? *Aqua Viva* 4: 11-15.
68. **Holm, P.**, Kalchauer, I., Hirsch, P. 2014. Schwarzmundgrundel & Co. – Fremde Fische in Flüssen und Seen. *Biologie in unserer Zeit* 6 (44): 392-399.
69. Hirsch, P.E., Schillinger, S., Weigt, H., **Burkhardt-Holm, P.** 2014. A hydro-economic model for water level fluctuations: Combining limnology with economics for sustainable development of hydropower. *PLOS ONE* 9 (12): 1-26.
70. Schubert, S., Peter, A., Schönenberger, R., Suter, M. J.-F., Segner, H., **Burkhardt-Holm, P.** 2014. Transient exposure to environmental estrogen affects embryonic development of brown trout (*Salmo trutta fario*). *Aquatic Toxicology* 157: 141-149.
71. Berli, B.I., Gilbert, M.J.H., Ralph, A.L., Tierney, K. B., **Burkhardt-Holm, P.** 2014. Acute exposure to a common suspended sediment affects the swimming performance and physiology of juvenile salmonids. *Comparative Biochemistry and Physiology, Part A: Molecular and Integrative Physiology* 176: 1-10.
72. Pietsch, C., Noser, J., Wettstein, F.E., **Burkhardt-Holm, P.** 2014. Unravelling the mechanisms involved in zearalenone-mediated toxicity in permanent fish cell cultures. *Toxicol* 88: 44-61.
73. Pietsch, C., Hollender, J., Dorusch, F., **Burkhardt-Holm, P.** 2014. Cytotoxic effects of pentachlorophenol (PCP) and its metabolite tetrachlorohydroquinone (TCHQ) on liver cells are modulated by antioxidants. *Cell Biology and Toxicology* 30 (4): 233-252.
74. Michel, C., Herzog, S., de Capitani, C., **Burkhardt-Holm, P.**, Pietsch, C. 2014. Natural mineral particles are cytotoxic to rainbow trout gill epithelial cells in vitro. *PLOS ONE* 9 (7): 1-11.

75. Pietsch, C., Michel, C., Kersten, S., Valenta, H., Dänicke, S., Schulz, C., Kloas, W., **Burkhardt-Holm, P.** 2014. In vivo effects of deoxynivalenol (DON) on innate immune responses of carp (*Cyprinus carpio* L.). *Food and Chemical Toxicology* 68: 44-52.
76. Michel, C., Schindler Wildhaber, Y., Epting, J., Thorpe, K., Huggenberger, P., Alewell, C. & **Burkhardt-Holm, P.** 2014. Artificial steps mitigate the effect of fine sediment on the survival of brown trout embryos in a heavily modified river. *Freshwater Biology* 59: 544-556.
77. Pietsch, C., Schulz, C., Rovira, P., Kloas, W., **Burkhardt-Holm, P.** 2014. Organ damage and hepatic lipid accumulation in carp (*Cyprinus carpio* L.) after feed-borne exposure to the mycotoxin, Deoxynivalenol (DON). *Toxins* 6: 756-778.
78. Pereira, M.L.A.M., Eppler, E., Thorpe, K.L., Wheeler, J.R., **Burkhardt-Holm, P.** 2014. Molecular and cellular effects of chemicals disrupting steroidogenesis during early ovarian development of brown trout (*Salmo trutta fario*). *Environmental Toxicology* 29 (2): 199-206.
79. Schindler Wildhaber, Y., Michel C., Epting J., Wildhaber, R.A., Huber, E., Huggenberger, P., **Burkhardt-Holm, P.**, Alewell, C. 2014. Effects of river morphology, hydraulic gradients, and sediment deposition on water exchange and oxygen dynamics in salmonid redds. *Science of the Total Environment* 470-471: 488-500.
80. Schwartz, P., Bucheli T. D., Wettstein, F.E., **Burkhardt-Holm, P.** 2013. Life-cycle exposure to the estrogenic mycotoxin zearalenone affects zebrafish (*Danio rerio*) development and reproduction. *Environmental Toxicology* 28 (5): 276-289.
81. Michel, C., Schmidt-Posthaus, H., **Burkhardt-Holm, P.** 2013. Suspended sediment pulse effects in rainbow trout (*Oncorhynchus mykiss*) – relating apical and systemic responses. *Canadian Journal of Fisheries and Aquatic Sciences* 70 (4): 630-641.
82. Burki, R., Krasnov, A., Bettge, K., Rexroad III, C.E., Afanasyev, S., Antikainen, M., **Burkhardt-Holm, P.**, Wahli, T., Segner, H. 2013. Molecular crosstalks between a chemical and a biological stressor and consequences on disease manifestation in rainbow trout. *Aquatic Toxicology* 127: 2-8.
83. Pietsch, C., Kersten, S., **Burkhardt-Holm, P.**, Valenta, H., Dänicke, S. 2013. Occurrence of deoxynivalenol and zearalenone in commercial fish feed: An initial study. *Toxins* 5: 184-192.
84. **Holm, P.**, Schulz, G., Athanasopulu, K. 2013. Meeresverschmutzung der neuen Art: Mikroplastik –ein unsichtbarer Störenfried, *Biologie in unserer Zeit* I (43): 27-33.
85. Kalchhauser, I., Mutzner, P., Hirsch, P., **Burkhardt-Holm, P.** 2013. Arrival of round goby *Neogobius melanostomus* (Pallas, 1814) and bighead goby *Ponticola kessleri* (Günther, 1861) in the Upper Rhine (Switzerland). *BiolInvasions Records* 2 (1): 79-83.
86. Ralph, A.L., Berli, B.I., **Burkhardt-Holm, P.**, Tierney, L.B. 2012. Variability in swimming performance and underlying physiology in rainbow trout (*Oncorhynchus mykiss*) and brown trout (*Salmo trutta*). *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology* 163 (3-4): 350-356.

87. Von Moos, N., **Burkhardt-Holm, P.**, Köhler, A. 2012. Uptake and effects of microplastics on cells and tissue of the blue mussel *Mytilus edulis* L. after an experimental exposure. *Environmental Science and Technology* 46: 11327-11335.
88. Burki, R., Krasnov, A., Bettge, K., Rexroad III, C.E., Afanasyev, S., Antikainen, M., Wahli, T., **Burkhardt-Holm, P.**, Segner, H. 2012. Pathogenic infections confound induction of the estrogenic biomarker vitellogenin in rainbow trout. *Environmental Toxicology and Chemistry* 31 (10): 2318-2323.
89. Segner, H., Wahli, T., **Burkhardt-Holm, P.** 2012. Combined effects of parasites, climate and pollution on brown trout, *Salmo trutta*, in Swiss rivers. *Comparative Biochemistry and Physiology A: Molecular and Integrative Physiology* 163 (1) – Supplement S: 40.
90. **Burkhardt-Holm, P.**, Segner, H., Schmid, P. 2012. Discover the cold: Are Antarctic fish capable of coping with anthropogenic chemicals. *Reports on Polar and Marine Research* 652: 21-25.
91. Schindler Wildhaber, Y., Michel, C., **Burkhardt-Holm, P.**, Bänninger, D., Alewell, C. 2012. Measurement of spatial and temporal fine sediment dynamics in a small river. *Hydrology and Earth System Sciences* 16 (5):1501-1515.
92. Thorpe, K.L., Pereira, M.L.A.M., Schiffer, H., **Burkhardt-Holm, P.**, Weber, K., Wheeler, J.R. 2011. Mode of sexual differentiation and its influence on the relative sensitivity of the fathead minnow and zebrafish in the fish sexual development test. *Aquatic Toxicology* 105: 412-420.
93. Pietsch, C., Bucheli, T., Wettstein, F., **Burkhardt-Holm, P.** 2011. Frequent biphasic cellular responses of permanent fish cell cultures to deoxynivalenol (DON). *Toxicology and Applied Pharmacology* 256: 24-34.
94. Häfeli, N., Schwartz, P., **Burkhardt-Holm, P.** 2011. Embryotoxic and genotoxic potential of biofilm and sediment in the catchment area of a sewage treatment plant in Switzerland. *Ecotoxicology and Environmental Safety* 74: 1271-1279.
95. Pereira M.L.A.M., Wheeler, J.R., Thorpe, K.L., **Burkhardt-Holm, P.** 2011. Development of an ex vivo brown trout (*Salmo trutta fario*) gonad culture for assessing chemical effects on steroidogenesis. *Aquatic Toxicology* 101: 500-511.
96. Schwartz, P., Thorpe, K.L., Bucheli, Th.D., Wettstein, F.E., **Burkhardt-Holm, P.** 2010. Short-term exposure to the environmentally relevant estrogenic mycotoxin zearalenone impairs reproduction in fish. *Science of the Total Environment* 409: 326-333.
97. Burki, R., Wahli, T., Segner, H., **Burkhardt-Holm, P.**, Rexroad, C.E., Afanasyev, S., Antikainen, M., Krasnov, A. 2010. Pathogenic infection attenuates the response of the estrogenic biomarker, vitellogenin, in rainbow trout. *Comparative Biochemistry and Physiology A: Molecular and Integrative Physiology* 157 (1): 23.
98. **Burkhardt-Holm, P.** 2010. Endocrine disruptors and water quality: A state-of-the-art review. *International Journal of Water Resources Development* 26 (3): 477-493.

99. **Burkhardt-Holm, P.** 2009. Klimawandel und Bachforellenrückgang - gibt es einen Zusammenhang? Resultate in der Schweiz. *Umweltwissenschaften und Schadstoff Forschung* 21: 177-185.
100. Scheurer, K., Alewell, C., Bänninger, D., **Burkhardt-Holm, P.** 2009. Climate and land-use changes affecting river sediment and brown trout in alpine countries – A review. *Environmental Science and Pollution Research* 16: 232-242.
101. Körner, O., Kohno, S., Schönenberger, R., Suter, M.J.F., Knauer, K., Guillet, L.J., **Burkhardt-Holm, P.** 2008. Water temperature and concomitant waterborne ethinylestradiol exposure affects the vitellogenin expression in juvenile brown trout (*Salmo trutta*). *Aquatic Toxicology* 90: 188-196.
102. Schubert, S., Peter, A., Burki, R., Schönenberger, R., Suter, M.J.F., Segner, H., **Burkhardt-Holm, P.** 2008. Sensitivity of brown trout reproduction to long-term estrogenic exposure. *Aquatic Toxicology* 90: 65-72.
103. **Burkhardt-Holm, P.** 2008. Decline of brown trout (*Salmo trutta*) in Switzerland – How to assess potential causes in a multi-factorial cause-effect relationship. *Marine Environmental Research* 66 (1): 181-182.
104. **Burkhardt-Holm, P.**, Segner, H., Burki, R., Peter, A., Schubert, S. 2008. Estrogenic Endocrine Disruption in Switzerland. *Assessment of Fish Exposure and Effects, Chimia* 62: 376-382.
105. **Burkhardt-Holm, P.**, Chebbi, C. 2008. Master's degree in sustainable development in Switzerland, the first master course comprising three faculties. *Environmental Science and Pollution Research* 15 (2): 136-142
106. Zimmerli, S., Bernet, D., **Burkhardt-Holm, P.**, Schmidt-Posthaus, H., Vonlanthen, P., Wahli, T., Segner, H. 2007. Assessment of fish health status in four Swiss rivers showing a decline of brown trout catches. *Aquatic Science* 69 (1): 11-25.
107. Schager, E., Peter, A., **Burkhardt-Holm, P.** 2007. Status of young-of-the-year brown trout (*Salmo trutta fario*) in Swiss streams: factors influencing YOY trout recruitment. *Aquatic Sciences* 69 (1): 41-50.
108. Körner, O., Vermeirssen, E.L.M., **Burkhardt-Holm, P.** 2007. Reproductive health of brown trout inhabiting Swiss rivers with declining fish catch. *Aquatic Sciences* 69 (1): 26-40.
109. Hartmann, P.C., **Burkhardt-Holm, P.**, Giger, W. 2007. Occurrence of polybrominated diphenyl ethers (PBDEs) in brown trout bile and liver from Swiss rivers. *Environmental Pollution* 146: 107-113.
110. **Burkhardt-Holm, P.** 2007. Project Fischnetz: Decline of fish catch in Switzerland. *Aquatic Sciences* 69 (1): 1-2.
111. **Burkhardt-Holm, P.**, Scheurer, K. 2007. Application of the weight-of-evidence approach to assess the decline of brown trout (*Salmo trutta*) in Swiss rivers. *Aquatic Sciences* 69 (1): 51-70.

112. Vermeirssen, E.L.M., Suter, M.J.-F., **Burkhardt-Holm, P.** 2006. Estrogenicity patterns in the Swiss midland river Lützelurg in relation to treated domestic sewage effluent discharges and hydrology. *Environmental Toxicology and Chemistry* 25: 2413-2422.
113. Suter, M.J.-F., Vermeirssen, E.L.M., **Burkhardt-Holm, P.** 2006. Pouvoir féminisant des rivières du Plateau suisse. *Lémaniques* 62: 6.
114. Hari, R.E., Livingstone, D.M., Siber, R., **Burkhardt-Holm, P.**, Güttinger, H. 2006. Consequences of climatic change for water temperature and brown trout populations in Alpine rivers and streams. *Global Change Biology* 12: 10-26.
115. Burki, R., Vermeirssen, E.L.M., Körner, O., Joris, C., **Burkhardt-Holm, P.**, Segner, H. 2006. Assessment of estrogenic exposure in brown trout (*Salmo trutta*) in a Swiss midland river: Integrated analysis of passive samplers, wild and caged fish, and vitellogenin mRNA and protein. *Environmental Toxicology and Chemistry* 25: 2077-2086.
116. Borsuk, M.E., Reichert P., Peter, A., Schager, E., **Burkhardt-Holm, P.** 2006. Assessing the decline of brown trout (*Salmo trutta*) in Swiss rivers using a Bayesian probability network. *Ecological Modelling* 192: 224-244.
117. Vermeirssen, E.L.M., Körner, O., Schönenberger, R., Suter, M.J.F., **Burkhardt-Holm, P.** 2005. Characterisation of environmental estrogens in river water using a three pronged approach: Active and passive water sampling and the analysis of accumulated estrogens in the bile of caged fish. *Environmental Science and Technology* 39: 8191-8198.
118. Vermeirssen, E.L.M., Burki, R., Joris, C., Peter, A., Segner, H., Suter, M.J.-F., **Burkhardt-Holm, P.** 2005. Characterisation of the estrogenicity of Swiss midland rivers using a recombinant yeast bioassay and plasma vitellogenin concentrations in feral male brown trout. *Environmental Toxicology and Chemistry* 24: 2226 - 2233.
119. Körner, O., Vermeirssen, E.L.M., **Burkhardt-Holm, P.** 2005. Intersex in feral brown trout from Swiss midland rivers. *Journal of Fish Biology* 67: 1734-1740.
120. **Burkhardt-Holm, P.**, Giger, W., Güttinger, H., Ochsenein, U., Peter, A., Scheurer, K., Segner, H., Staub, E., Suter, M.E. 2005. Where have all the fish gone? The reasons why the fish catches in Swiss rivers are declining. *Environmental Science and Technology* 39: 441A- 447A.
121. Eggen, R.I.L., Behra, R., **Burkhardt-Holm, P.**, Escher, B. I., Schweigert, N. 2004. Challenges in Ecotoxicology. *Environmental Science and Technology* 38: 59A-64A.
122. Bernet, D., Schmidt-Posthaus, H., Wahli, T., **Burkhardt-Holm, P.** 2004. Evaluation of two monitoring approaches to assess effects of waste water disposal on histological alterations in fish. *Hydrobiologia* 524: 53-66.
123. Faller, P., Kobler, B., Peter, A., Sumpter, J. P., **Burkhardt-Holm, P.** 2003. Stress status of gudgeon (*Gobio gobio*) from rivers in Switzerland with and without input of sewage treatment plant effluent. *Environmental Toxicology and Chemistry* 22: 2063-2072.

124. Wahli, T., Knuesel, R., Bernet, D., Segner, H., Pugovkin, D., **Burkhardt-Holm, P.**, Escher, M., Schmidt-Posthaus, H. 2002. Proliferative kidney disease in Switzerland: Current state of knowledge. *Journal of Fish Diseases* 25: 491-500.
125. Schweigert, N., Eggen, R. I. L., Escher, B., **Burkhardt-Holm, P.**, Behra, R. 2002. Ecotoxicological assessment of surface waters: A modular approach integrating in vitro methods. *ALTEX* 19: 30-37.
126. **Burkhardt-Holm, P.**, Peter, A., Segner, H. 2002. Decline of fish catch in Switzerland. Project Fishnet: A balance between analysis and synthesis. *Aquatic Sciences* 64: 36-54.
127. **Burkhardt-Holm, P.** 2002. Proliferative kidney disease: Why is it of interest for the Swiss project "fishnet"? *Journal of Fish Diseases* 25: 441-442.
128. Schmidt-Posthaus, H., Bernet, D., Wahli, T., **Burkhardt-Holm, P.** 2001. Morphological organ alterations and infectious diseases in brown trout (*Salmo trutta*) and rainbow trout (*Oncorhynchus mykiss*) exposed to polluted river water. *Diseases of Aquatic Organisms* 44: 161-170.
129. Bernet, D., Schmidt, H., Wahli, T., **Burkhardt-Holm, P.** 2001. Effluent from a sewage treatment works causes changes in serum chemistry of brown trout (*Salmo trutta* L.). *Ecotoxicology and Environmental Safety* 48: 140-147.
130. Bernet, D., Schmidt, H., Wahli, T., **Burkhardt-Holm, P.** 2001. Auswirkung von geklärtem Abwasser auf infektiöse Krankheiten bei der Bachforelle (*Salmo trutta* L.). *Fischökologie* 12: 1-16.
131. **Burkhardt-Holm, P.** 2001. Der Fisch – wie lässt er sich als Indikator für die Qualität seiner Umwelt einsetzen? *Gaia* 10: 6-15.
132. Stoffel, M. H., Wahli, T., Friess, A. E., **Burkhardt-Holm, P.** 2000. Exposure of rainbow trout (*Oncorhynchus mykiss*) to nonylphenol is associated with an increased chloride cell fractional surface area. *Schweizer Archiv für Tierheilkunde* 142: 263-267.
133. Lamche, G., **Burkhardt-Holm, P.** 2000. Nonylphenol provokes a vesiculation of the Golgi apparatus in three fish epidermis cultures. *Ecotoxicology and Environmental Safety* 47: 137-148.
134. Lamche, G., **Burkhardt-Holm, P.** 2000. Changes in apoptotic rate and cell viability in three fish epidermis cultures after exposure to nonylphenol and to a waste water sample containing low concentrations of nonylphenol. *Biomarkers* 5: 205-218.
135. **Burkhardt-Holm, P.**, Wahli, T., Meier, W. 2000. Nonylphenol affects the granulation pattern of epidermal mucous cells in rainbow trout, *Oncorhynchus mykiss*. *Ecotoxicology and Environmental Safety* 46: 34-40.
136. Bernet, D., Schmidt, H., Wahli, T., **Burkhardt-Holm, P.** 2000. Effects of waste water on fish health: An integrated approach to biomarker responses in brown trout (*Salmo trutta* L.). *Journal of Aquatic Ecosystem and Stress Recovery* 8: 143-151.

137. Schmidt, H., Bernet, D., Wahli, T., Meier, W., **Burkhardt-Holm, P.** 1999. Active biomonitoring with brown trout and rainbow trout in diluted sewage plant effluents. *Journal of Fish Biology* 54: 585-596.
138. Escher, M., Wahli, T., Büttner, S., Meier, W., **Burkhardt-Holm, P.** 1999. The effect of sewage plant effluent on brown trout (*Salmo trutta fario*): A cage experiment. *Aquatic Sciences* 61: 93-110.
139. **Burkhardt-Holm, P.**, Bernet, D., Hogstrand, C. 1999. Increase of metallothionein-immunopositive chloride cells in the gills of brown trout and rainbow trout after exposure to sewage treatment plant effluents. *Journal of Histochemistry and Cytochemistry* 31: 339-346.
140. **Burkhardt-Holm, P.**, Oulmi, Y., Schroeder, A., Storch, V., Braunbeck, T. 1999. Toxicity of 4-chloroaniline in early life-stages of zebrafish (*Danio rerio*): II. Cytopathology and regeneration of liver and gills after prolonged exposure to water-borne 4-chloroaniline. *Archives of Environmental Contamination Toxicology* 37: 85-102.
141. Bernet, D., Schmidt, H., Meier, W., **Burkhardt-Holm, P.**, Wahli, T. 1999. Histopathology in fish: Proposal for a protocol to assess aquatic pollution. *Journal of Fish Disease* 22: 25-34.
142. Wahli, T., Meier, W., Segner, H., **Burkhardt-Holm, P.** 1998. Immunohistochemical detection of vitellogenin in male brown trout from Swiss rivers. *Journal of Histochemistry and Cytochemistry* 30: 753-758.
143. Schmidt, H., Posthaus, H., Busato, A., Wahli, T., Meier, W., **Burkhardt-Holm, P.** 1998. Transient increase in chloride cell number and heat shock protein expression (hsp70) in brown trout (*Salmo trutta fario*) exposed to sudden temperature elevation. *Biological Chemistry* 379: 1227-1233.
144. Paulsen, H., Poulsen, N. E., Iglesias, J., Olmedo, M., Korsgaard, B., Lavens, P., **Burkhardt-Holm, P.** 1998. Indicators of nutritional status of turbot *Scophthalmus maximus* (L., 1758) larvae. *Boletín del Instituto Español de Oceanografía* 14: 5-18.
145. Lamche, G., Meier, W., Suter, M., **Burkhardt-Holm, P.** 1998. Primary culture of dispersed skin epidermal cells of rainbow trout *Oncorhynchus mykiss* Walbaum. *Cellular and Molecular Life Sciences* 54: 1042-1051.
146. **Burkhardt-Holm, P.**, Schmidt, H., Meier, W. 1998. Heat shock protein (hsp70) in brown trout epidermis after sudden temperature rise. *Comparative Biochemistry and Physiology A* 120: 35-41.
147. **Burkhardt-Holm, P.**, Escher, M., Meier, W. 1997. Waste water management plant effluents cause cellular alterations in the skin of brown trout. *Journal of Fish Biology* 50: 744-758.
148. **Burkhardt-Holm, P.** 1997. Lectin-histochemistry of rainbow trout (*Oncorhynchus mykiss*) gill and skin. *Journal of Histochemistry and Cytochemistry* 29: 893-899.
149. **Burkhardt-Holm, P.** 1997. Gesucht: Indikatoren für die Qualität von Fließgewässern. Ein Beispiel zur Schaffung von Synergien zwischen Forschung und Lehre. *Gaia* 6: 311-315.

150. **Burkhardt-Holm, P.**, Kafitz, K. W., Güttinger, H. R., Schachner, M. 1996. Testosterone elevates expression of tenascin-R and oligomannosidic carbohydrates in developing male zebra finches. *Journal Neuroscience Research* 46: 385-392.
151. **Burkhardt-Holm, P.**, Kafitz, K. W., Güttinger, H. R., Schachner, M. 1995. Exogenous testosterone alters expression pattern of cell recognition molecules in brains of juvenal zebra finches. *NeuroReport* 6 (3): 433-436.
152. **Burkhardt-Holm, P.**, R. Kaufmann-Hayoz, 1995. Naturschutz in der Lehre der Allgemeinen Ökologie an der University of Bern. *Der Ornithologische Beobachter* 92: 395-398.
153. Braunbeck, T., **Burkhardt-Holm, P.**, Görge, P.G., Nagel, R., Negele, R.D., Storch, V. 1992. Regenbogenforelle und Zebraäbrling, zwei Modelle für verlängerte Toxizitätstests: Relative Empfindlichkeit, Art- und Organspezifität in der cytopathologischen Reaktion von Leber und Darm auf Atrazin. *Schriftenreihe des Vereins für Wasser, Boden und Lufthygiene* 89: 109-145.
154. **Burkhardt-Holm, P.**, Holmgren, S. 1992. A study of the alimentary canal of the brachyopterygian fish *Polypterus senegalus* with electron microscopy and immunohistochemistry. *Acta Zoologica* 73: 85-94.
155. **Burkhardt-Holm, P.**, Schumacher, U., Welsch, U., Storch, V. 1989. Carbohydrate histochemistry of the intestine of teleosts with different dietary habits. *Zeitschrift für mikroskopisch-anatomische Forschung* 103: 476-494.
156. **Burkhardt-Holm, P.**, Eckmann, R., Storch, V. 1989. Schädigung des Darmepithels von Coregonenlarven (*Coregonus fera*) durch Artemia-Fütterung: Eine bakterielle Infektion. *Journal of Applied Ichthyology* 1: 2-11.
157. **Burkhardt-Holm, P.**, Holmgren, S. 1989. A comparative study of neuropeptides in the intestine of two stomachless teleosts (*Poecilia reticulata*, *Leuciscus idus melanotus*) under conditions of feeding and starvation. *Cell and Tissue Research* 255: 245-254.
158. Storch, V., **Holm, P.**, Ruhberg, H. 1988. Ultrastructure and histochemistry of the alimentary tract in some onychophora - Zur Ultrastruktur und Histochemie des Darmkanals verschiedener Onychophora. *Zoologischer Anzeiger* 221: 281-294.
159. Segner, H., **Burkhardt, P.**, Avila, E.M., Storch, V., Juario, J.V. 1987. Effects of Chlorella-feeding on larval milkfish, *Chanos chanos*, as evidenced by histological monitoring. *Aquaculture* 67: 113-116.
160. Segner, H., **Burkhardt, P.**, Avila, E.M., Juario, J.V., Storch, V. 1987. Nutrition-related histopathology of the intestine of milkfish *Chanos chanos* fry. *Diseases of Aquatic Organisms* 2: 99-107.
161. **Burkhardt, P.**, Schumacher, U., Welsch, U., Storch, V. 1987. Lectin-histochemistry of the teleost intestine and liver under normal and starved conditions. *Zeitschrift Für Mikroskopisch-Anatomische Forschung* 101: 301-317.

162. **Burkhardt, P.** 1987. Electronmicroscopical Studies on the Intestine of *Leuciscus idus melanotus* und *Poecilia reticulata*. Zeitschrift Fur Mikroskopisch-Anatomische Forschung 101: 507-522.
163. Storch, V., **Burkhardt, P.** 1986. Die Reaktion der Mitteldarmdrüse des Süßwasserstrandfloh *Orchestia cavimana* auf verschiedene Nahrung. Carolina 44: 149-152.
164. Strus, J., **Burkhardt, P.**, Storch, V. 1985. The ultrastructure of the midgut glands in *Ligia italica* (Isopoda) under different nutritional conditions. Helgoländer Meeresuntersuchungen 39 (4): 367-374.
165. Storch, V., **Burkhardt, P.** 1984. Influence of nutritional stress on the hepatopancreas of *Talitrus saltator* (Peracarida, Amphipoda). Helgoländer Meeresuntersuchungen 38 (1): 65-73.

REPORTS AND OTHER PUBLICATIONS
(EXCLUDING ANNUAL AND FINAL REPORTS OF RESEARCH PROJECTS)

1. Bussmann, K., **Holm, P.**, 2022. Schwarzmeergrundeln Schweiz: Strategie, Massnahmen und Umsetzung - eine Bilanz. Zeitschrift Aqua Viva, 04/2022. (in press).
2. **Burkhardt-Holm, P.**, 2022. IWC Report of the Scientific Committee (Co-Author). International Whaling Commission Cambridge, Virtual meeting, 25.04. – 13.05.2022
3. **Burkhardt-Holm, P.**, 2021. Cumulative Effects and Multiple Stressors. Report of the Pollution 2025 Workshop. Paper SC/68D/REP/02. International Whaling Commission, 01.-04.11. 2021. IWC.ALL.418.
4. **Burkhardt-Holm, P.**, Mani, T., Kalberer, A. 2019. Mikroplastik - Zivilisationsmüll im und um den Rhein herum. Regio Basiliensis 60: p 121-129.
5. **Burkhardt-Holm, P.**; Leistenschneider, C.; Segner, H.; Amaral-Zettler, L.; Gerds, G. 2019. Occurrence of microplastics in the antarctic seas. . The Expedition PSI 17 of the Research Vessel POLARSTERN to the Weddell Sea in 2018/2019, 120-131.
6. **Burkhardt-Holm, P.**, Hall, A., 2019. Potential mitigation measures for reducing exposure of cetaceans to persistent organic pollutants (POPs). Paper SC/68A/E/03. International Whaling Commission, Cambridge, United Kingdom.
7. **Burkhardt-Holm, P.**, N'Guyen, A. 2018. Microplastics in the food web of Cetaceans – A review. Paper SC/678/E/11. International Whaling Commission, Cambridge, United Kingdom.

8. Mani, T., **Burkhardt-Holm, P.**, Segner, H., Zennegg, M., Amaral-Zettler, L. 2018. Microplastics – A potential threat to the remote and pristine ecosystems of the Antarctic Seas? The Expedition of the Research Vessel “Polarstern” to the Antarctic in 2017/18 (PS-III). In: Schröder, M. 2018. The Expedition PS III of the Research Vessel POLARSTERN to the southern Weddell Sea in 2018. Berichte zur Polar- und Meeresforschung - Reports on Polar and Marine Research, 2018, Vol 717: 123-133.
9. Selling, J., Herr, H., Heyer, K., Siebert, U., **Burkhardt-Holm, P.** 2016. Epidermal conditions, lesions and malformations in cetaceans of the Strait of Gibraltar. Paper SC/66b/E/13. International Whaling Commission, Cambridge, United Kingdom.
10. Ritter, F., Asmutis-Silvia, R., **Burkhardt-Holm, P.**, Kaufman, G. 2016. Approach to a definition of near misses. Paper SC/66b/HIM/03. International Whaling Commission, Cambridge, United Kingdom.
11. Herr, H., Ritter, F., **Holm, P.**, Stachowitsch, M., Tiedemann R. 2016. Recommendations for conservation of Baltic harbour porpoises with special regard to the critically endangered Baltic Proper harbour porpoise subpopulation. Working Paper, International Whaling Commission, scientific committee, Cambridge, United Kingdom, 05/2016.
12. Mark, F.C., Koschnick, N., Scheuffele, H., Strobel, A., **Burkhardt-Holm, P.**, Segner, H., Papetti, C., Lucassen, M., Riginella, E., Mazzoldi, C., La Mesa, M. 2015. Cold adaptation vs. sensitivity to climate change and pollution in Antarctic Notothenioids: Physiological plasticity, genetic regulation, immunology and reproductive traits. Expedition Programme PS96 Polarstern 06.12.2015-14.02.2016 Cape Town – Punta Arenas: 16-18.
13. **Holm, P.** 2013. Cetaceans and Climate change. Working Paper, International Whaling Commission, scientific committee, Cambridge, United Kingdom, 08.06.2016.
14. Lucassen, M., Rentsch, H., Kock, K.-H., Busch, M., Elsheimer, A., Emde, S., Jones, C., Klimpel, S., Kuhn, T., Siegel, V., Wolske, J., **Burkhardt-Holm, P.**, Segner, H., Schmid, P., Koschnick, N., et al. 2012. The Expedition of the Research Vessel “Polarstern” to the Antarctic in 2012 (ANT-XXVIII/4). Berichte zur Polar- und Meeresforschung 652: 3-89.
15. **Burkhardt-Holm, P.**, Segner, H., Schmid, P. 2011. Fish as bioindicators: Condition and health of ground fish species around Elephant Island, the South Shetland Islands and at the tip of the Antarctic Peninsula, Expedition Programme PS88 Polarstern: 89-90.
16. **Burkhardt-Holm, P.** 2011. Linking Water Quality to Human Health and Environment: The Fate of Micropollutants. Working Paper Series, No. IWP/WP/3/2011. National University of Singapore.
17. Schmid, P., Zennegg, M., **Holm, P.**, Pietsch, C. 2010. Ökotoxikologische Beurteilung von PCB in Gewässern der Schweiz: Polychlorierte Biphenyle (PCB) in Gewässern der Schweiz, Publikation Bundesamt für Umwelt BAFU, Berne, Switzerland, 60-71.

18. **Burkhardt-Holm, P.** 2010. Contribution to the Report "A risk assessment modeling and chemical prioritization workshop for cetaceans: Pollution in the 21st Century". International Whaling Commission's Pollution 2000+ steering committee workshop, Marine Mammal Center, Sausalito, Canada, 22-24.
19. Dollenmeier, P., Renz, H., Giger, W., Güttinger, H., **Holm, P.**, Ochsenbein, U. 2004. Fischnetz. Dem Fischrückgang auf der Spur: fischnetz, Kurzbericht des Projekts "Netzwerk Fischrückgang Schweiz".
20. Dollenmeier, P., Renz, H., Giger, W., Güttinger, H., **Holm, P.**, Ochsenbein, U. 2004. Fischnetz. Dem Fischrückgang auf der Spur: Schlussbericht des Projekts "Netzwerk Fischrückgang Schweiz".
21. **Holm, P.** 2000. Book review: Oehlmann, J., Markert, B. (eds.): Ökotoxikologie: Ökosystemare Ansätze und Methoden (Ecotoxicology: Ecosystemic approaches and methods), ecomed Verlagsgesellschaft, Landsberg 1999. Basic and Applied Ecology 1, 95.
22. Wahli, T., **Burkhardt-Holm, P.** 1998. Willy Meier, 1946-1998. Memorandum. Schweizerisches Archiv für Tierheilkunde 88, 523-524.
23. **Burkhardt-Holm, P.**, Wahli, T., Ochsenbein, A. 1998. Untersuchung von männlichen Fischen auf das Vorhandensein von Vitellogenin (östrogensensitive Reaktion) in Bachforellen sowie von histologischen Veränderungen in der Leber von Fischen. Zwischenbericht Dezember 1998. Zentrum für Fisch- und Wildtiermedizin.

BOOKS AND BOOK CHAPTERS

1. Ruesch Schweizer, C., Di Giulio, A., **Burkhardt-Holm, P.** 2018. Qualifikationsziele von Lehrangeboten zu Nachhaltigkeit. Ein Blick in die Hochschulpraxis in Deutschland und der Schweiz. In: Leal Filho, W. (Hrsg.) Nachhaltigkeit in der Lehre. Eine Herausforderung für Hochschulen. Berlin: Springer, S. 257-275.
2. Merrill, M.Y., **Burkhardt-Holm, P.**, Chang, C.H., Islam, M.I., Chang, Y., (eds.) 2017. Education and Sustainability: Paradigms, Policies and Practices in Asia, Routledge. 377pp.
3. **Holm, P.**, Holm J. 2014. Warum werden Wale gejagt? In: Zoss, H., **Holm, P.**, von Gunten, F. (eds.) Jahrring 2014. Ehrfurcht vor dem Leben. Rubmedia Verlag, Bern, 11-33.
4. **Holm, P.** 2010. Kinder und Karriere - ein Spagat, der zu meistern ist. In: Piechulla, B. (ed.) Professorin und Mutter - wie geht das? Spektrum Akademischer Verlag, Heidelberg, 48-55.
5. Burger, P., **Burkhardt-Holm, P.**, Krysiak, F.C. 2010. Educating Experts for Sustainable Development, The Master's Degree in Sustainable Development at the University of Basel. In: Darbellay, F., Paulsen, Th. (eds.) Im Spiegel der Disziplinen - Gedanken über inter- und transdisziplinäre Forschungs- und Lehrpraktiken. Verlag Peter Lang, Bern, 133-153.
6. **Holm, P.** 2010. Faszinierende Fische, Haupt-Verlag, Bern, 208 pp.

7. **Burkhardt-Holm, P.** 2009. Bioindikatoren - wie uns Pflanzen und Tiere helfen können. In: Renneberg, R., Bioanalytik für Einsteiger. Spektrum Akademischer Verlag, Heidelberg, 138-139.
8. **Burkhardt-Holm, P.** 2008. Fischnetz: Involving anglers, authorities, scientists and the chemical industry to understand declining fish yields. In: G. Hirsch Hadorn, H. Hoffmann-Riem, S. Biber-Klemm, W. Grossenbacher, D. Joye, C. Pohl, U. Wiesmann, E. Zemp (eds.) Handbook of Transdisciplinary Research, Springer, 127-142.
9. **Burkhardt-Holm, P.**, Segner, H. 2007. Lebenswissenschaften und Allgemeine Ökologie. Gemeinsamkeiten, Unterschiede und gegenseitige Beeinflussung. In: Di Giulio, A., Defila, R., Hammer, T., Bruppacher, S. (eds.) Allgemeine Ökologie. Innovationen in Wissenschaft und Gesellschaft. Festschrift für Ruth Kaufmann-Hayoz, Haupt Verlag, Bern, 103-125.
10. **Holm, P.** 2006. Was ist mit unseren Fischen los? Gewässersituation heute. In: H. Hüster Plogmann (ed.) Fische und Fischer aus zwei Jahrtausenden. Eine fischereiwirtschaftliche Zeitreise durch die Nordwestschweiz. Forschungen in Augst 39, 79-87.
11. Adomßent, M., Altner, G., Becker, E., Beckervordersandforth, C., Dehler, J., Fischer, H., Grunewald, A., Grupp, H., **Holm, P.**, Jastorff, B., Kreibich, R., Kruse, L., Michelsen, G., Neuweiler G., Simonis, U.E. 2004. Hochschule neu denken. Neuorientierung im Horizont der Nachhaltigkeit. Ein Memorandum. Verlag für akademische Schriften, Frankfurt, 43.
12. **Burkhardt-Holm, P.**, Hacker, H.-J., Segner, H., Storch, V. 1993. Enzyme histochemistry of the intestine and liver of golden ide (I). In: T. Braunbeck, W. Hanke, and H. Segner (eds.) Fish - Ecotoxicology and Ecophysiology. VCH, Weinheim, 239-256.
13. Braunbeck, T., Arnold, H., **Burkhardt-Holm, P.** 1992. Subletale Veränderungen bei Fischen durch Pestizide. In: H. Weidmann and H. Meder (eds.) Sandoz-Rheinfonds. Verhandlungen des Symposiums vom 3.-4. September 1992. Sandoz International AG, Basel, 60-67.
14. **Burkhardt-Holm, P.**, Braunbeck, T., Storch, V. 1990. Auswirkung der beim Sandoz-Unfall im November 1986 in den Rhein gelangten Chemikalien auf die Ultrastruktur des Darms von Aalen. In: R. Kinzelbach and G. Friedrich (eds.) Biologie des Rheins. Gustav Fischer Verlag, Stuttgart/New York, 393-404.
15. **Burkhardt, P.**, Storch, V. 1989. Ultrastructural observations on the intestine of golden ide (*Leuciscus idus melanotus* L.) under different nutritional conditions. In: N. De Pauw, E. Jaspers, H. Ackefors, and N. Wilkins (eds.) Aquaculture – a biotechnology in progress. European Aquaculture Society, Bredene, Belgium, 807-812.

 PROCEEDINGS

1. **Burkhardt-Holm, P.** 2016. Concurrent Session 201: Earth Science: Water. Summary of Science and Technology in Society Forum. Kyoto , STS, 13th Annual Meeting: 135-142.
2. **Holm, P.**, Zehnder, A.J.B. (2016). Fischrückgang in der Schweiz. Wo stehen wir heute? In: Aqua Viva. Zeitschrift für Gewässerschutz 58 (2):4-8
3. **Holm, P.**, 2012. Faszinierende Fische: Biologie, Bedeutung und Zukunft. Zusammenfassung des Vortrags vom 15. März 2011. Mitteilungen. Jubiläumsband zum 225-jährigen Bestehen der Naturforschenden Gesellschaft in Bern. NGB Neue Folge Band 69: 31-32.
4. **Burkhardt-Holm, P.** 2011. How hormonally active substances in our environment affect humans and wildlife - What do we know and what can be done? Lundqvist, J. (ed.) On the Water Front: Selections from the 2010 World Water Week in Stockholm. Stockholm International Water Institute (SIWI), Stockholm: 50-63.
5. Knauer, K., Hitzfeld, B., Hollert, H., Kubiak, R., Becker van Slooten, K., Daniel, O., Escher, B., Scheringer, M., Segner, H., Ahlers, J., **Holm, P.** 2005. Tagungsbericht»Prozesse verstehen – Risiken bewerten«. 10. Jahrestagung der SETAC-GLB am 28.–30.09.2005 in Basel. Umweltwissenschaften und Schadstoff-Forschung 17: 256-257.
6. **Burkhardt-Holm, P.** 2004. Biologie, Lebensraumansprüche und Gefährdungsursachen der Bachforelle. Internationale Fachtagung»Lebensraum Bach«, Blieskastel, Germany, 20.11.2004.
7. Borsuk M.E., Reichert, P., **Burkhardt-Holm P.** 2004. A Bayesian belief network for modelling brown trout (*Salmo trutta*) populations in Switzerland. The International Environmental Modelling and Software Society Conference Complexity and Integrated Resources Management. Osnabrück, Germany, 14-17.06.2004.
8. **Burkhardt-Holm, P.** 2004. Fischnetz: Welche Konsequenzen hat das 5-jährige Projekt für den Gewässerschutz in der Schweiz? Verband Schweizer Abwasser- und Gewässerschutzfachleute (VSA), 60. Hauptmitgliederversammlung, Olten, Switzerland, 02.04.2004.
9. **Burkhardt-Holm, P.** 2003. Approach to identify the role of contaminants in the decline of brown trout in Switzerland. American Fisheries Society Annual Meeting, Volume 133. Quebec, Canada.
10. **Burkhardt-Holm, P.** 2002. Decline in fish catches in Switzerland: The project Fishnet evaluate the causes. In: Challenges in Environmental Risk Assessment and Modelling: Linking Basic and Applied Research. Society of Environmental Toxicology and Chemistry (SETAC), Vienna, Austria, 59.

11. Suter, M.J.-F., Aerni, H.R., Kobler, B., Faller, P., Rutishauser, B.V., Wettstein, F.E., **Burkhardt-Holm, P.**, Fischer, R., Giger, W., Hungerbühler, A., Peter, A., Schönenberger, R., Eggen, R. I. L. 2002. The combination of biological and chemical analysis for the determination of estrogenicity in Swiss waste- water treatment plant effluents. Jahresbericht 2001 Kompetenzzentrums Analytische Chemie (CEAC).
12. Borsuk, M. E., **Burkhardt-Holm, P.**, Reichert, P. 2002. A Bayesian network for investigating the decline in fish catch in Switzerland. In: Rizzoli, A. E., Jakeman, A. J. (eds.) Integrated assessment and decision support. Proceedings of the 1st biennial meeting of the International Environmental Modelling and Software Society, Lugano, Switzerland, 108-113.
13. Faller, P., Kobler, B., Peter, A., **Burkhardt-Holm, P.** 2001. Effects of effluents from a Swiss sewage treatment plant on health parameters in gudgeon (*Gobio gobio*). In: European Association of Fish Pathologists (ed.) Proc. 10th internat. conference on diseases in fish and shellfish, Dublin, Ireland, 36.
14. Schmidt-Posthaus, H., **Burkhardt-Holm, P.**, Knüsel, R., Wahli, T., Segner, H. 2001. Investigation of distribution and prevalence of PKD in Swiss feral and farmed brown trout. In: European Association of Fish Pathologists (ed.). Proc. 10th internat. conference on diseases in fish and shellfish, Dublin. Ireland.
15. Schweigert, N., Behra, R., Escher, B., **Burkhardt-Holm, P.**, Eggen, R. I. L. 2001. Entwicklung einer zellulären Testbatterie für einen routinemässigen Einsatz in der aquatischen Ökotoxikologie. - In: ZET Zentrum für Ersatz- und Ergänzungsmethoden zu Tierversuchen (ed.) Proc. 10. Kongress über Alternativen zu Tierversuchen, Linz, Austria.
16. **Holm, P.** 2001. Das Projekt "Fischrückgang Schweiz": mögliche Ursachen und Massnahmen gegen den Fischrückgang. Natur und Mensch 1, 21-27.
17. Lamche, G., Meier, W., **Burkhardt-Holm, P.** 2000. Die Fischepidermis als Modell für ökotoxikologische Studien. In: H. Schöffl, H. Spielmann, F. P. Gruber, A. H., F. Harrer, W. Pfaller, and H. A. Tritthart (eds.) 6., 7., 8. Österreichischer internationaler Kongress über Ersatz- und Ergänzungsmethoden zu Tierversuchen in der biomedizinischen Forschung. Springer Verlag, Linz, Austria, 221-227.
18. **Burkhardt-Holm, P.**, Bloesch, J. 2000. Fish as bioindicators for pollutants in the Danube river: An approach. - In: Horvatic, J. (ed.) Proc. 33. Conference of the Int. Association for Danube research, Osijek, Croatia. Josip Juraj Strossmayer University of Osijek and Croatian Ecological Society, 375-382.
19. **Burkhardt-Holm, P.**, Wahli, T. 1999. Liver of several male brown trout caught in Swiss rivers express vitellogenin and show histological alterations. International Scientific Conference Ascona. Ascona, Switzerland.
20. **Burkhardt-Holm, P.**, Lamche, G., Meier, W. 1998. Die Fischepidermis als Modell für ökotoxikologische Studien. ALTEX 15: 51.

21. **Burkhardt-Holm, P.**, Wahli, T., Negele, R. D., Meier, W. 1997. Effects of nonylphenol on trout surface epithelia. Annual Meeting of the Society for Experimental Biology University of Kent, Canterbury, Great Britain, A5.15.
22. Schmidt, H., Escher, M., Wahli, T., Meier, W., **Burkhardt-Holm, P.** 1996. Belastung von Fließgewässern und Auswirkungen auf die Fischpopulation am Beispiel der Langeten. - Tagung der Fachgruppe "Fischkrankheiten" in Verbindung mit der EAFP/deutsche Sektion, DE-Königswartha, 24.-26.9.1996. Verlag der deutschen Veterinärmedizinischen Gesellschaft e.V., 155-160.
23. Escher, M., Schmidt, H., Büttner, S., Wahli, T., Meier, W., **Burkhardt-Holm, P.** 1996. Gesundheitsgefährdung von Bachforellen unterhalb einer Kläranlage. Tagung der Fachgruppe "Fischkrankheiten" in Verbindung mit der EAFP/deutsche Sektion, DE-Königswartha, 24.-26.09.1996. Verlag der deutschen Veterinärmedizinischen Gesellschaft e.V., 161-166.
24. **Burkhardt-Holm, P.**, Braunbeck, T., Storch, V. 1994. Histo- und cytopathologische Effekte von 4-Chloranilin in den Kiemen embryonaler Zebraabärblinge (*Brachydanio rerio*). Tagung der Deutschen Sektion der EAFP, Wolfegg, Baden-Württemberg, Germany, 14./15.09.1994, 104-107.

ABSTRACTS AND POSTERS (SELECTED)

1. Wiegleb, J., Hirsch Ph.E., Seidel, F., Rauter, G, **Burkhardt-Holm, P.** 2022. Swimming competition! Who beats the flow in a hydraulic barrier for invasive fish? INTECOL Geneva, 28.08.-02.09.2022.
2. Leistenschneider, C., Primpke, S., Taubner, H., **Burkhardt-Holm, P.**, Gerdts, G. 2022. Microplastics and ship paint particles in the Weddell Sea, Southern Ocean: A forensic investigation. MICRO 2022, Lanzarote, 14.-18.11.2022.
3. Leistenschneider, C., **Burkhardt-Holm, P.**, Mani, Th., Primpke, S., Taubner, H., Gerdts, G. 2022. Paint Particles in the Weddell Sea (Antarctica): A Forensic Investigation. SETAC annual meeting, Copenhagen, 15.-19.05.2022.
4. Leistenschneider, C., Primpke, S., **Burkhardt-Holm, P.**, Gerdts, G. 2020. Microplastics and ship paint in the Weddell Sea, Antarctica. MICRO- Fate and Impacts of Microplastics, Lanzarote, 23.-27.11.2020.
5. Bussmann, K., **Burkhardt-Holm, P.** 2019. Stowaways on my boat? Engaging boat owners with aquatic invasive species using citizen science. ICYMARE, Bremen, 24.-29.09.2019.
6. **Holm, P.** 2018. Microplastics in Rhine Riverbed Sediments. MICRO 2018, Lanzarote, 19.11.2018.
7. Mani, T., Frehland, S., Kalberer, A., **Burkhardt-Holm, P.** 2018. MOSeS: Microplastics Oil Separation Standard for Surface, Soil and Sediment Samples, Monte Verità, 30.10.2018.

8. Bussmann, K., **Burkhardt-Holm, P.** 2018. Round goby eggs and leisure boats – the search for the missing link (a proposal). Goby meeting, Chioggia, Venice Italy. 07.-09.03.2018.
9. Wiegleb, J., Hirsch, P.E., **Burkhardt-Holm, P.** 2018. Do round gobies overcome strong currents in fish passes? -Application of 3D-printed fish. Goby meeting, Chioggia, Venice Italy. 07.-09.03.2018.
10. Hirsch, P.E., Schillinger, M., **Burkhardt-Holm, P.** Weigt, H. 2017. Integrating Economic and Ecological Benchmarking for a Sustainable Development of Hydropower. Abstract NTNU Sustainability Science Conference, Trondheim Norway. 18.-20.10.2017.
11. Adrian-Kalchhauser, I., Walser, J.C., Schwaiger, M., **Burkhardt-Holm, P.** 2017. Maternal mRNA is able to transmit temperature information across generations in wild fish. Abstract. ESEB, Groningen, Netherlands, 20.-25.8.2017.
12. Adrian-Kalchhauser, I., Walser, J.C., **Burkhardt-Holm, P.** 2017. Maternal mRNA is able to transmit temperature information across generations in wild fish. Abstract. Biology17, Bern, Switzerland, 02.-03.02.2017.
13. Somerville, V., Walser, J.C., **Burkhardt-Holm, P.**, Adrian-Kalchhauser, I. 2017. Methylome wide association study of two reproductive phenotypes in the round goby. Abstract. Biology17, Bern, Switzerland, 02-03.02.2017.
14. Strobel, A., Segner, H., Zennegg, M., Schmid, P., **Burkhardt-Holm, P.** 2016. Are Antarctic fish capable of coping with anthropogenic chemicals? Swiss Canadian Polar Research Symposium. 21-22.11.2016.
15. Hirsch, P.E., Schillinger, M., Apolloni, K., Weigt, H., **Burkhardt-Holm, P.** 2016. Combining ecological and economic benchmarks towards a sustainable development of hydropower. Societas Internationalis Limnologia, DGL, SIL Austria meeting. Vienna, Austria, 28.-30.09.2016.
16. Strobel, A., Segner, H., **Burkhardt-Holm, P.** 2016. Effects of environmental pollutants and changing temperature on the hepatic energy budget of High-Antarctic fish. Abstract SCAR Open Science Conference, Kuala Lumpur, Malaysia, 20.-30.08.2016.
17. Adrian-Kalchhauser, I., Hirsch, P.E., Behrmann-Godel, J., N'Guyen, A., Watzlawczyk, S., Gertzen, S., Borchering, J., **Burkhardt-Holm, P.** 2016. Genetic evidence for the translocation of invasive bighead goby along rivers by commercial vessels. Poster. Neobiota, Vianden, Luxembourg, 14.-16.09.2016.
18. Adrian-Kalchhauser, I., Somerville, V., Walser, J.C., **Burkhardt-Holm, P.** 2016. Epigenetic mechanisms and the success of invasive vertebrates. Poster. Neobiota, Vianden, Luxembourg, 14.-16.09.2016.
19. Strobel, A., Segner, H., **Burkhardt-Holm, P.** 2016. How efficient and thermally flexible is the toxicant metabolism of Antarctic notothenioid fish? Poster. SCAR Open Science Conference, Kuala Lumpur, Malaysia, 20.-30.08.2016.

20. Adrian-Kalchhauser, I., Walser, J.C., Pippel, M., Schloissnig, S., **Burkhardt-Holm, P.** 2016. Transgenerational adaptation mechanisms in wild populations of *Neogobius melanostomus*. Abstract. EMBO Symposium New Models for Linking Evolution and Ecology, Heidelberg, Germany, 08.-11.05.2016.
21. Kalchhauser, I., Hirsch, P.E., N'Guyen, A., Watzlawczyk, S., Gertzen, S., Borcharding, J., **Burkhardt-Holm, P.** 2015. Adaptation and selection processes at the invasion front of a globally expanding vertebrate. Poster. Congress of the European Society for Evolutionary Biology, 09.-14.08.2015.
22. Hirsch, P.E., Thorlacius, M., Rüegg, A., Indermaur, A., Brodin, T., **Burkhardt-Holm, P.** 2015. In water, on land, and in the air - transporting experimental fish across Europe. Poster. Fishbase Symposium, Stockholm, Sweden, 19.10.2015.
23. Kalchhauser, I., Burkhardt-Holm P. 2015. Ponto-Caspian gobies. How bighead goby population genetics relate to shipping. Abstract. CeMEB Meeting, Tjörnö, Sweden. April 2015.
24. Kalchhauser, I., Borcharding, J., **Burkhardt-Holm, P.** 2015. European bighead goby display large scale genetic homogeneity and small scale genetic differentiation in correlation with shipping patterns. European Goby Meeting, Umea, Sweden. 24.-27.02.2015.
25. Kalchhauser, I., Hirsch, P.E., N'Guyen, A., **Holm P.** 2015. Kooperation von Forschung und Gesellschaft für ein erfolgreiches Management von invasiven Arten. Poster. Swiss Forum on Conservation Biology SWIFCOB 15, Biodiversität und Politik: Vielfalt bewegt, 16.01.2015.
26. Hirsch, P.E., Eckmann, R., Weigt, H., **Burkhardt-Holm, P.** 2014. Water-level fluctuations and habitat mismatch affect phenotypes of perch (*Perca fluviatilis*). Abstract. EcoFil, České Budějovice, Czech Republic, 08.-11.09.2014.
27. Strobel, A., **Holm, P.**, Segner, H. 2014. How efficient are the xenobiotica biotransformation capacities in antarctic notothenioid fish compared to temperate species? Poster. ICBF Conference, Edinburgh, United Kingdom, 03.10.2014.
28. Kalchhauser, I., Burkhardt-Holm P. 2014. Schwarzmeergrundeln in der Schweiz. Abstract. AGIN Symposium, Olten, Switzerland, 23.01.2014.
29. Kalchhauser, I., N'Guyen, A., Hirsch, P.E., **Burkhardt-Holm, P.** 2013. Ponto-Caspian gobies in Switzerland – Science meets Management. Abstract. European Vertebrate Pest Management Conference, Turku, Finland, 24.09.2013.
30. Kalchhauser, I., Mutzner, P., Hirsch, P.E., N'Guyen A., **Burkhardt-Holm, P.** 2013. Invasion genetics of goby species in European freshwaters. Poster. Freshwater Invasives – Networking for Strategy, Galway, Ireland, 08.-11.04.2013.
31. Kalchhauser, I., Mutzner, P., **Burkhardt-Holm P.** 2012. Invasion genetics of bighead and round goby in European freshwaters. Poster. Evolutionary ecology and management of aquatic ecosystems, EAWAG, Dübendorf, 22.-23.11.2012.

32. Kalchauer, I., Mutzner, P., **Burkhardt-Holm, P.** 2012. Tracing provenience and dispersal mode of gobies invading Switzerland by microsatellite analysis. Poster. NEOBIOTA 2012, Pontevedra, Spain, 11.09.2012.
33. Berli B., **Burkhardt-Holm P.**, Tierney K.B. 2011. Sediment alters the swimming performance of individual and schooling salmonids. Abstract. Annual meeting of the Canadian Society of Zoologists, Ottawa, Canada, 16.-20.05.2011.
34. Michel C., **Burkhardt-Holm P.** 2011. Suspended mineral particles affect rainbow trout *Oncorhynchus mykiss*. Histopathology workshop on lymphoid organs (including musculoskeletal/nervous system pathology). Abstract. 15th International conference on diseases of fish and shell fish of the European Association of Fish Pathologists (EAFP), Split, Croatia, 12.-16.09.2011.
35. Schindler Y., Michel C., **Burkhardt-Holm P.**, Thorpe K., Alewell C. 2010. The spatial and temporal dynamic of fine sediment input in a small Swiss river in the foothills of the Alps, Poster. Swiss- Korean Science Days, Seoul, South Korea, 09.-10.09.2010.
36. Schindler, Y., Michel, C., **Burkhardt-Holm, P.**, Thorpe, K., Alewell, C. 2010. The abiotic environment of the interstitial of a small Swiss river in the foothills of the Alps and its influence on gravel spawning brown trout (*Salmo trutta L.*). Poster. European Geosciences Union General Assembly, Vienna, Austria, 02.-07.05.2010.
37. A Marca-Pereira, M., Thorpe, K.L., **Burkhardt-Holm, P.** 2007. Abstract and poster: Development of an in vitro gonad culture to quantify the effects of aromatase inhibitors in brown trout. NRP50 meeting, Magglingen, Switzerland, 09.-11.09.2007.
38. A Marca-Pereira, M., Thorpe, K.L., **Burkhardt-Holm, P.** 2007. Abstract and poster. Development of an in vitro gonad culture to quantify the effects of aromatase inhibitors in brown trout. 8th International Symposium on Reproductive Physiology of Fish, Saint Malo, France, 03.-08.06.2007.
39. **Burkhardt-Holm, P.** 2007. Decline of brown trout (*Salmo trutta*) in Switzerland - How to assess potential causes in a multi-factorial cause-effect relationship. Abstract. 14th International Symposium PRiMO (Pollutant Responses in Marine Organisms), Florianópolis, Santa Catarina, Brazil, 6.- 9.05.2007.
40. Körner, O., Kohno, S., Schönenberger, R., Suter, M.J.F., Knauer, K., Guillet, L.J., **Burkhardt-Holm, P.** 2006. Effect of water temperature on vitellogenin expression in juvenile brown trout after exposure to ethinylestradiol, Poster. NFP 50 Annual Meeting, Giessbach, Brienz, Switzerland, 15.-17.10.2006.
41. Burki, R., Vermeirssen, E.L.M., Körner, O., Joris, C., **Burkhardt-Holm, P.**, Segner, H. 2006. Combined effect of estrogenic exposure and the proliferative kidney disease in rainbow trout, spoken presentation. Abstract. ESCPB 2006 congress, Antwerpen, Belgium, 17.-20.09.2006.

42. Abicht, H., Knauert, S., **Burkhardt-Holm, P.**, Knauer, K. 2006. Bestimmung der Toxizität von Kupfer für die permanente Fischzelllinie Rtgill: Oxidativer Stress und DNS-Schäden. Abstract. 11th Annual Meeting of SETAC-GLB, Landau, Germany, 03.-05.09.2006.
43. Leimgruber, A., Knauert, S., **Burkhardt-Holm, P.**, Knauer, K. 2006. Co-Toleranz von Phytoplanktongemeinschaften gegenüber PS-II Inhibitoren. Abstract. 11th Annual Meeting of SETAC-GLB, Landau, Germany, 03.-05.09.2006.
44. **Burkhardt-Holm, P.** 2006. Wenn die Angler klagen. Forschung und offene Fragen zum Fischrückgang in der Schweiz. Abstract. IGB, Berlin, Germany, 16.11.2006.
45. Schwartz, P., Hartmann, N., Bucheli, T.D., **Burkhardt-Holm, P.** 2006. General toxicity and endocrine disruption - Effects of zearalenone on early life stages of Zebrafish (*Danio rerio*), Poster. NFP 50 Annual Meeting, Giessbach, Brienz, Switzerland, 15.-17.10.2006.
46. **Burkhardt-Holm, P.**, Burki, R., Segner, H., Peter, A., Schubert, S., Suter, M.J.-F., Schönenberger, R., Borsuk, M. 2006. Estrogenic endocrine disruption in Switzerland: Assessment of fish exposure and modeling of effects on the population level (SAFE). Poster. Gordon Research Conference, Il Ciocco, Barga, Italy, 04.-09.06.2006.
47. **Burkhardt-Holm, P.**, Segner, H., Burki, R., Peter A., Borsuk M. 2005. Endocrine disruption in Switzerland: Assessment of fish exposure and effects – SAFE. Abstract. Workshop NRP 50 Endocrine Disruptors, Cadro, Lugano, Switzerland, 02.-04.10.2005.
48. Vermeirssen, E.L.M., Körner, O., Joris, C., **Holm, P.**, Segner, H. 2005. Assessment of estrogenic exposure in brown trout (*Salmo trutta*). Poster. Workshop NRP 50 Endocrine Disruptors, Cadro, Switzerland, 02.-04.10.2005.
49. Bopp, S., **Holm, P.**, Knauer, K. 2005. Ist die Detektion reaktiver Sauerstoffspezies (ROS) ein geeigneter unspezifischer Biomerker für Mikroverunreinigungen? In: Books of Abstracts of 10th Annual Meeting of SETAC-GLB, Basel, Switzerland, 28.-30.09.2005.
50. Körner, O., Knauer, K., Thoma, G., **Holm, P.** 2005. Wie geeignet ist Vitellogenin als Biomarker einer östrogenen Belastung im Freiland? In: Books of Abstracts of 10th Annual Meeting of SETAC-GLB, Basel, Switzerland, 28.-30.09.2005.
51. Körner, O., Vermeirssen, E.L.M., **Burkhardt-Holm, P.** 2005. Survey of plasma vitellogenin and intersex in brown trout from Swiss rivers with reported catch decline. Poster. 15th SETAC Europe Annual Meeting, Lille, France, 22.-26.05.2005.
52. Suter, M.J.F., Strehler, A., Schönenberger, R., Vermeirssen, E.L.M., Eggen, R.I.L., **Burkhardt-Holm, P.** 2004. How estrogenic are Swiss rivers? A comparative approach using chemical analysis, bioassays and model predictions. Abstract. Portland, Oregon, USA, 14.-18.11.2004.
53. Vermeirssen, E.L.M., Burki, R., Joris, C., Peter, A., Segner, H., Suter, M.J.F., **Burkhardt-Holm, P.** 2004. Characterisation of the estrogenicity of Swiss Midland rivers using a recombinant yeast bioassay and plasma vitellogenin concentrations in feral male brown trout. Abstract. 5th International Symposium on Fish Endocrinology, Castellon, Spain, 05.-9.09.2004.

54. Körner, O., Zimmerli, S., Vermeirssen, E.L.M., Segner, H., **Burkhardt-Holm, P.** 2004. Catch decline in Swiss trout (*Salmo trutta*): are reproductive parameters impaired? Abstract. 5th International Symposium on Fish Endocrinology, Castellon, Spain, 05.-09.09.2004.
55. Vermeirssen, E.L.M., Körner, O., **Burkhardt-Holm, P.** 2004. Mini caging of brown trout and passive water sampling methods for assessing environmental estrogens in Swiss Midland rivers. Abstract. CREDO cluster workshop on the ecological relevance of chemically induced endocrine disruption in wildlife. University of Exeter, Exeter, Great Britain, 5.-7.07.2004.
56. Hartmann, P.C., **Burkhardt-Holm, P.**, Giger, W. 2002. Polybrominated Diphenyl Ether Flame Retardants in Fish Bile and Livers from Swiss Rivers. Abstract. European Meeting on Environmental Chemistry, Geneva, Switzerland, 12/2002.
57. Hartmann, P.C., **Burkhardt-Holm, P.**, Giger, W. 2002. Polybrominated Diphenyl Ether Flame Retardants: Methods and First Assessment in Fish from Swiss Rivers. Abstract. Workshop on the Analysis of Brominated Flame Retardants in Environmental Samples. CSIC, Barcelona, Spain, 10/2002.
58. Hartmann, P.C., **Burkhardt-Holm, P.**, Giger, W. 2002. Polybrominated Diphenyl Ether Flame Retardants: Methods and First Assessment in Fish from Swiss Rivers. Abstract. Fall Meeting of the Swiss Chemical Society, Basel, Switzerland, 10/2002.
59. Schweigert, N., Behra, R., Escher, B., **Burkhardt-Holm, P.**, Eggen, R. I. L. 2001. Ecotoxicology as a part of the Swiss modular concept in the evaluation of surface waters. Abstract. 6th International Conference of the Aquatic Ecosystem, Amsterdam, Netherlands.
60. von Tscherner, C., Wyder, M., Nicolet, J., **Burkhardt-Holm, P.**, Suter, M. M. 1998. Is *Malassezia pachydermatitis* phagocytized by activated keratinocytes in culture? Abstract. 14th AAVD/ACVD meeting, San Antonio, USA.
61. Wahli, T., **Burkhardt-Holm, P.**, Schneeberger, U., Meier, W. 1995. Investigation of the decrease in fish populations in two Swiss river systems. Abstract. EAFP conference, Palma de Mallorca, Spain.

PUBLIC OUTREACH

POPULAR ARTICLES & PUBLIC RELATIONS

Selection of over 140 published articles:

1. **Holm, P.** 2022. Invasion der Schwarzmeergrundeln - Massnahmen zum Schutz des Rheins und anderer Gewässer. Forschungsprojekte in der Region. Uni am Markt 24.09.-16.11.2022.
2. **Holm, P.** 2022. Invasive Fische - unerwünschte Nebenfolge unserer globalen Mobilität. I Zukunftsdialog Nachhaltigkeit, Sustainable Future Network, Basel, 16.09.2022.
3. **Holm, P.** 2022. Klimawandel – eine Herausforderung für die Fische und Gewässer. Rotary Clubs, Sissach & Gelterkinden, 05.10.2022.
4. **Holm, P.** 2022. Neozoen und ausgestorbene Arten - unsere Herausforderungen, unsere Verantwortung, unsere Handlungsmöglichkeiten. Podiumsdiskussion "Artenvielfalt Hochrhein", ARGE Hochrhein, Bad Zurzach, 27.08.2022.
5. **Holm, P.** 2022. Der Sound der Unterwassertiere, Radio SRF, Wissenschaftsmagazin, 19.02.2022. <https://www.srf.ch/audio/wissenschaftsmagazin/muaaah-boong-oder-gragrag-was-wassertiere-sich-erzaehlen?id=12143129>
6. **Holm, P.** 2022. Wo Eisfische brüten, Eisberge entstehen, und Mikroplastik wandert – eine besondere Antarktisexpedition, firmm-Annual Meeting, Aarau, 19.02.2022
7. **Holm, P.** 2021. Mikroplastikforschung in der Antarktis, Rector's Dinner, Basel. 28.10.2021
8. **Holm, P.** 2021. Wo Eisfische brüten, Eisberge entstehen, und Mikroplastik wandert – eine besondere Antarktisexpedition, Naturforschende Gesellschaft in Basel, NGIB, 16.09.2021.
9. **Holm P.,** 2021. Die Spur aus Plastik. Meeresforschung in der Schweiz. Radio SRF 2: Kontext-Sendung. 29. Juli 2021. <https://www.srf.ch/audio/kontext/die-spur-aus-plastik?partId=12028899>
10. **Holm P.,** 2021. Tiere sind dem Plastik ausgeliefert. SRF4 News aktuell, 1. Juni 2021. <https://www.srf.ch/news/panorama/schiff-verliert-tonnen-plastik-vor-sri-lanka-bahnt-sich-eine-umweltkatastrophe-an>
11. **Holm, P.,** 2017. Raubfische breiten sich in Schweizer Gewässern aus. NZZ am Sonntag, 22.07.2017. <https://nzzas.nzz.ch/wissen/grundeln-bereit-fuer-die-invasion-raubfisch-ld.1307251>
12. **Holm, P.,** Noch stoppt das Rheinkraftwerk Rheinfelden die Schwarzmeergrundeln, 2017. SRF Regionaljournal Aargau / Solothurn, 17.07.2017, <https://www.srf.ch/news/regional/aargau-solothurn/noch-stoppt-das-rheinkraftwerk-rheinfelden-die-schwarzmeergrundel>
13. **Holm, P.** 2012. Invasive Fische im Rhein bei Basel. NZZ, 03.10.2012.
14. **Holm, P.** 2004. Fischnetz final report and short reports. EAWAG, Dübendorf.
15. **Holm, P.** 2004. Sur la trace du déclin ichthyologique. Tracés: débits de poissons 4: 12-14.

16. **Holm, P.** 2003. Fischnetz "Netzwerk Fischrückgang Schweiz". In: Bachforellen sterben in Bayern. Schriftenreihe des Landesfischereiverbandes Bayern 9: 43-50.
17. Hari, R.E., Livingstone, D.M., Siber, R., **Burkhardt-Holm, P.**, Güttinger, H. 2003. EAWAG Jahresbericht 2003: 56-57.
18. Güttinger, H., **Holm, P.**, Peter, A., Suter, M. 2003. Fischnetz: Chronologie eines nationalen Projektes. EAWAG Jahresbericht 2003: 9-14.
19. **Holm, P.** 2002. Fische in Not. Detektivarbeit im Projekt Fischnetz. Hotspot 6/2002, 11p.
20. Güttinger, H., **Holm, P.**, Baumann, P. 2002. Die Entwicklung des Fischnährtierbestandes in schweizerischen Fließgewässern zwischen 1980 und 2000. fischnetz-info 10: 5-7.
21. **Holm, P.** 2002. "Fischnetz"-Projekte und Prioritäten im letzten Drittel. fischnetz-info 9: 20-21.
22. Schweigert, N., Behra, R., Eggen, R., Escher, B., **Holm, P.** 2001. Wie können Schadstoffeinflüsse in Fließgewässern nachgewiesen werden? EAWAG-News 51: 10-12.
23. Schweigert, N., Eggen, R. I. L., Escher, B. I., **Burkhardt-Holm, P.**, Behra, R. 2001. Wie kann Ökotoxikologie einen Beitrag zum Fischnetz liefern? fischnetz-info 8: 9-11.
24. **Holm, P.** 2001. Umgang mit komplexen Problemen. fischnetz-info 8: 11-13.
25. **Holm, P.** 2001. PKD - die proliferative Nierenkrankheit der Forelle: Ergebnisse des Workshops in Kastanienbaum. fischnetz-info 8: 5-7.
26. **Holm, P.** 2001. Fortschritte im "Fischnetz": Die prioritären Untersuchungsfragen in diesem Jahr. fischnetz-info 7: 15-17.
27. **Holm, P.** 2001. Das Projekt "Netzwerk Fischrückgang Schweiz": Ziele, Chancen und Hindernisse. Mitteilungen zur Fischerei 68: 121-130.
28. **Holm, P.** 2001. Fische - Indikatoren und Gewinner. EAWAG-News 51: 23-25.
29. Faller, P., Kobler, B., Peter, A., **Holm, P.** 2001. Auswirkungen des Auslaufes der ARA Surental auf Gründlinge (*Gobio gobio*). fischnetz-info 7: 9-10.
30. Escher, M., **Holm, P.**, Staub, E., Wahli, T. 2001. Die proliferative Nierenkrankheit (PKD): Erste Ergebnisse der gesamtschweizerischen Erhebung. fischnetz-info 6: 10-12.
31. **Burkhardt-Holm, P.** 2001. Vorwort. Gas Wasser Abwasser 3: 141-143.
32. **Holm, P.** 2000. Der Fischrückgang in den schweizerischen Fließgewässern. Auslöser des Projektes "Fischnetz" und Konsequenzen für die Forschung. Festschrift "100 Jahre Sportfischer-Verein Bern": 109-113.
33. **Holm, P.** 2000. Wie weiter mit den Hypothesen zum Fischnetz. fischnetz-info 5: 17-19.
34. **Holm, P.** 2000. Wirkung ausgewählter Pestizide auf Fische. fischnetz-info 4: 6-7.
35. **Burkhardt-Holm, P.**, Studer, C. 2000. Hormonaktive Stoffe im Abwasser. Sind Fische und andere wasserlebende Tiere bedroht? Gas Wasser Abwasser 7: 504-509.
36. Peter, A., **Holm, P.** 1999. "Fischnetz" - Erforschung des Fischrückganges in schweizerischen Fließgewässern. Bulletin Schweizerischer Verband der Umweltfachleute SVU-ASEP-ASAP 5: 4-6.

37. Peter, A., **Holm, P.**, Ochsenbein, U., Staub, E. 1999. Erste Synthese zum Problem Fischrückgang Schweiz. *fischnetz-info* 2: 10-11.
38. **Holm, P.** 1999. Der Einbezug von Teilprojekten. *fischnetz-info* 3: 6-7.
39. **Holm, P.** 1999. Projektorganisation: Aufgaben und Verantwortlichkeiten. *fischnetz-info* 3: 5-6.
40. **Holm, P.** 1999. Vitellogenin in Fischen. *fischnetz-info* 2: 5.
41. **Holm, P.** 1999. Editorial: Kraftvoll und zielstrebig an der Sache bleiben - doch sich gelegentlich zurücklehnen: für ein Vorwärtskommen ist beides nötig! *fischnetz-info* 2, 1.
42. Zürcher, M., Schumann, P., **Burkhardt-Holm, P.** 1998. Vorfluter unter die Lupe genommen: Beispiel Alte Aare. *Wasser Energie Luft* 90: 121-124.
43. **Holm, P.** 1998. Das Leuchten der Kiemenzellen - Umweltforschung auf der Suche nach neuen Werkzeugen. Unipress, University of Bern.
44. Frick, E., Nowak, D., Reust, C., **Burkhardt-Holm, P.** 1998. Der Fischrückgang in den schweizerischen Fließgewässern. *Gas Wasser Abwasser* 4: 261-264.
45. **Burkhardt-Holm, P.** 1998. Fische als Indikatoren für Umweltbelastungen. *VGL Information* 3.
46. **Holm, P.** 1997. Schadstoffe - auch ein Forschungsthema der Allgemeinen Ökologie. Unipress, University of Bern.
47. **Holm, P.** 1996. Projektarbeiten in Allgemeiner Ökologie. Unipress, University of Bern.