

**DR. ARNE MICHAEL MALZAHN**

Place of birth: Elmshorn, Germany  
Date of birth: May 4<sup>th</sup> 1971  
Nationality: German

Work address:  
Alfred-Wegener Institute for Polar and Marine Research  
Ostkaje 1007  
D-27498 Helgoland  
Germany  
Telephone: +49 4725 819322  
Fax: +49 4725 819369  
e-mail: arne.malzahn@awi.de

Home address:  
Wilhelmshavener Strasse 699  
D-27498 Helgoland  
Germany  
Telephone: +49 4725 640244

**PRESENT POSITION**

2006- Assistant professor at the Alfred-Wegener Institute for Polar and Marine Research focussing on experimental ecology on trophic interactions and nutrient transfer dynamics through food webs, long term development of trophic interactions and sandeel ecology

**PAST POSITIONS**

2005-2006 Project scientist at the Alfred-Wegener Institute for Polar- and Marine Research, working on sandeel ecology.  
2003-2005 Ph.D. Student at the Alfred-Wegener Institute for Polar- and Marine Research, Biologische Anstalt Helgoland, Germany  
2001-2002 Scientist within the EU-Project "Ecocarp", Institute for Marine Research, Kiel, Germany

**ACADEMIC QUALIFICATIONS AND TRAINING**

May 2006 Ph.D., University of Kiel, Germany PhD Thesis: "Larval fish dynamics in changing environments"  
Jan 2001 Diploma in Biology at the University of Kiel, Germany  
2000-2001 Institute for Marine Research, Kiel, Germany. Diploma thesis: "Growth and mortality of larval coregonid fish at different temperatures"  
1997-2000 Study of Biology at the University of Kiel, Germany (Main subjects: Fisheries Biology, Physical Oceanography, and Zoology)  
1994-1997 Basic studies of Biology at the University of Kiel, Germany

**FUNDING:**

2005-2006 Applicant for the project "Untersuchung der Substratwahl und Substratpräferenz sowie der Habitatbindung von Sandaalen". Bundesamt für Naturschutz. 1 year post-doc funding and consumables.

**OTHER EMPLOYMENTS**

April-July 2001 Aquaculture evaluator for the "Deutsche See GmbH"  
1999-2005 Electrofishing and artificial propagation of coregonid fishes, sea trout and salmon within the "Fischartenhilfsprogramm" Schleswig-Holstein, Fischbrutanstalt Alt-Mühlendorf  
1999-2001 Research assistant at the Institute for Marine Research, Dept. Fisheries Biology  
1996-1998 Research assistant at the GEOMAR in the Deep Sea project BIGSET

**FIELD EXPERIENCE ABROAD**

April-May 2002                      Research field trip to the Chinese provinces Hubei and Yunnan  
April 2003                              Research trip to the Institute of Hydrobiology, Wuhan, Hubei Province, China

**RESEARCH CRUISES**

April 1999                              Research cruise with FS ALKOR to the Central Bornholm Basin, Baltic Sea within the EU Project "CORE"  
April 2004                              Research cruise with FS ALKOR to the Southern North Sea within the German GLOBEC Project  
May 2004                                Research cruise with FS ALKOR to the Southern North Sea within the German GLOBEC Project

**TEACHING**

2000-2005                              - Intensive course in Fisheries Biology "Larval Fish" (IfM and later IFM-GEOMAR)

**PROFESSIONAL AFFILIATIONS**

American Society of Limnology and Oceanography (ASLO)  
Early Life History Section of the American Fisheries Society

**OTHER QUALIFICATIONS**

- Foreign languages: fluent English
- Reviewer for manuscripts submitted to Aquaculture
- Reviewer for manuscripts submitted to Aquatic Ecology
- Reviewer for manuscripts submitted to Archiv für Hydrobiologie
- Reviewer for manuscripts submitted to Continental Shelf Research
- Reviewer for manuscripts submitted to Ecotropica
- Reviewer for manuscripts submitted to Fundamental and Applied Limnology
- Reviewer for manuscripts submitted to Journal of Marine Systems
- Reviewer for manuscripts submitted to Journal of Plankton Research
- Reviewer for manuscripts submitted to Marine Biology
- Reviewer for manuscripts submitted to MEPS
- Certified research diver since 1998

**Peer-reviewed publications**

**Boersma, M., Aberle, N., Hantzsche, F. M., Schoo, K. L., Wiltshire, K. H., Malzahn, A. M.** (2008). Nutritional Limitation Travels up the Food Chain, *International Review of Hydrobiology*, 93, 479-488.

**Wiltshire, K. H., Malzahn, A. M., Greve, W., Wirtz, K., Janisch, S., Mangelsdorf, P., Manly, B. F. J., Boersma, M.** (2008). Resilience of North Sea phytoplankton spring blooms dynamics: an analysis of long term data at Helgoland Roads, *Limnology and Oceanography*, 53, 1294-1302.

**Aberle, N., Malzahn, A.M.** (2007). Interspecific and nutrient-dependent variations in stable isotope fractionation: experimental studies simulating pelagic multitrophic systems, *Oecologia*, 154(2), 291-303.

**Boersma, M., Malzahn, A. M., Greve, W., Javidpour, J.** (2007). The first occurrence of the ctenophore *Mnemiopsis leidyi* in the North Sea, *Helgoland Marine Research*.

**Malzahn, A., Clemmesen, C., Wiltshire, K. H., Laakmann, S., Boersma, M.** (2007). Comparative nutritional condition of larval dab *Limanda limanda* and lesser sandeel *Ammodytes marinus* in a highly variable environment, *Marine ecology-progress series*, 334, 205-212.

**Malzahn, A. M., Boersma, M.** (2007). Year-to-year variation in larval fish assemblages of the Southern North Sea, *Helgoland Marine Research*.

**Malzahn, A.M., Aberle, N., Clemmesen, C., Boersma, M.** (2007). Nutrient limitation of primary producers affects planktivorous fish condition, *Limnology and Oceanography*, 52(5), 2062-2071.

**Baumann, H., Hinrichsen, H-H., Malzahn, A., Möllmann, C., Köster, F. W., Temming, A.** (2006). Recruitment variability in Baltic Sea sprat (*Sprattus sprattus*) is tightly coupled to temperature and transport patterns affecting the larval and early juvenile stages, *Canadian Journal of Fisheries and Aquatic Sciences*, 63, 2191-2201.

**Malzahn, A. M.** (2006). Larval fish dynamics in changing environments, Dissertation, Christian Albrechts Universität zu Kiel.

**Malzahn, A. M., Clemmesen, C., Rosenthal, H.** (2003). Temperature effects on growth and nucleic acids in laboratory-reared larval coregonid fish, *Marine ecology-progress series*, 259, 285-293.

### **Not peer-reviewed publications**

**Baumann, H., Malzahn, A.** (2007). New analyses of juvenile sprat growth and temporal origin in the German Bight (North Sea), *Globec International Newsletter*, 13, 30-31.  
{[http://web.pml.ac.uk/globec/products/newsletter/news13\\_1.pdf](http://web.pml.ac.uk/globec/products/newsletter/news13_1.pdf)}.

**Malzahn, A., Beusekom, J.E.E. van, Wiltshire, K., Aberle, N., Boersma, M.** (2007). Shift in larval fish' diets related to phytoplankton blooms revealed by stable isotope analysis, *Globec International Newsletter*, 13/2, 68-69.

**Boersma, M., Augustin, C. B., Knotz, S., Schütte, T., Malzahn, A. M., Laakmann, S., Beusekom, J. E. E. van** (2006). Effects of nutritional quality on copepod reproduction, *GLOBEC International Newsletter*, Vol.12, No.1, 67-69.

### **Talks**

**Malzahn, A. M., Clemmesen, C., Aberle, N., Boersma, M.** (2008). Does food quality really matter?, 32nd Annual Larval Fish Conference, Kiel, August 4.-7. 2008.

**Aberle, N., Malzahn, A.M.** (2007). Inter- and intra-specific variations in stable isotope fractionation:

experimental studies simulating pelagic multi-trophic systems., European Marine Biology Symposium (EMBS), Kiel, 27.08.07.

**Malzahn, A. M.** (2007). Are fish larvae what they eat? Food-web dynamics in changing environments and diet-specific variations in stable isotope fractionation, COAST Symposium, 10-11.4.2007, Helgoland, Germany.

**Malzahn, A. M., Aberle, N., Petereit, C., Clemmesen, C., Schoo, K., Hantzsche, F., Boersma, M.** (2007). Differential effects of nutrient-limited primary production on larval fish and hydromedusae condition, European Marine Biology Symposium (EMBS), Kiel, 27. -31.08.07.

**Aberle, N., Malzahn, A.** (2006). Inter- and intra-specific variations in stable isotope fractionation - experimental studies simulating pelagic multi-trophic systems., ASLO Summer Meeting, 05.05.06, Victoria, Canada.

**Aberle-Malzahn, N., Malzahn, A. M.** (2006). Inter- and intraspecific variations in stable isotope fractionation – experimental studies simulating pelagic multi-trophic systems, ASLO Summer Meeting, 4-9.Jun., Victoria, Canada.

**Malzahn, A.** (2006). Larval fish ecology: From field observations to experimental hypothesis testing, COAST Symposium, 15-16.2.2006, Hamburg, Germany.

**Malzahn, A. M., Aberle-Malzahn, N., Clemmesen, C., Boersma, M.** (2006). Primary production under nutrient limitation affects larval fish condition, ALSO Summermeeting 2006, 4-9.Jun., Victoria, Canada.

**Malzahn, A. M., Boersma, M.** (2005). Feld- und Laboruntersuchungen zum Wachstum von Fischlarven., Helgoland Foodweb Projekt Statusseminar, 27.-28.10.2005, Helgoland, Germany.

**Wiltshire, K. H., Malzahn, A. M., Boersma, M., Greve, W., Freund, J.** (2005). Shifts in phytoplankton and zooplankton interactions related to the temperature rise in the North Sea, ASLO Conference 18-24.06 Santiago de Compostella 2005 Spain.

**Malzahn, A. M., Boersma, M.** (2004). Feld- und Laboruntersuchungen zum Wachstum von Fischlarven., Helgoland Foodweb Projekt Statusseminar, 29.-30.09.2004, Helgoland, Germany.

**Malzahn, A.M., Boersma, M.** (2003). Fischlarven-Zooplankton Interaktionen., Helgoland Foodweb Projekt Kick-Off-Meeting, 12.6. 2003, Helgoland, Germany.

## Posters

**Schoo, K., Aberle, N., Malzahn, A. M., Boersma, M.** (2007). Phosphorus-Limitation in Phytoplankton and the propagation of limitation signals to primary consumers, 42. European Marine Biology Symposium, 27.-31.8.2007, Kiel, Germany.

**Malzahn A M, Clemmesen C, Wiltshire K H, Laakmann S, Boersma, M.** (2005). Trophic interactions

between copepods, larval fish and ctenophores during a spring bloom at Helgoland roads., ASLO Summer Meeting, Santiago di Campostela, Spain, 19-24.6.2005.

**Malzahn, A. M., Boersma, M.** (2004). Larval fish assemblages in a changing environment, AWI-Doktorandentag 20.-22.06.2004, Bremerhaven, Germany.