



Aquaculture Training Courses

At **Aquaculture Innovations** we continuously strive to provide high quality Aquaculture Training Courses to directly meet needs within the Industry. Our **Aquaculture Academy** in Grahamstown, South Africa, is equipped to provide exactly this sort of Practical Training Experience, and is continuously expanding to cover new technologies and offer training in additional areas. All of our training programs are run through our company **Aquaponics Innovations**. The primary focus of our Aquaculture Training is on the practical components and disciplines that one needs to master in order to be a successful Fish Farmer or Aquaponist.

We currently offer the Aquaculture Training Courses listed in the following pages of this eBrochure.

Terms:

- We reserve the right to postpone a Course that does not have adequate delegates.
- Full payment is required with Registration to secure your booking.
- Bookings close on the Wednesday prior to each Course, or once we have the maximum number of delegates Registered for a Course, whichever comes first.
- If we cancel a Course we automatically move your Registration to the following dates on which the same Course is offered. There is no charge for this, including for the changed accommodation dates if we booked for you. If this does not suit you we will refund you in full less a 10% administration fee.
- If you cannot attend a Course at short notice we automatically move your Registration to the following dates on which the same Course is offered. There is no charge for this, but you will be charged to alter the accommodation dates if we booked for you, if the establishment at which you were booked levies such a fee.
- Course Refund Policy: up to 4 weeks prior to the Course 70%, 2 – 4 weeks prior 40%, <2 weeks = no refund.

Courses:

Practical Fish Farmer Course (5 days of life on a fish farm - Grahamstown) Dates TBC

Aquaculture System Management Course (3 days theory – Pretoria) Dates TBC

Commercial Aquaponics Course (2 day theory & practical – Pretoria) Dates TBC

Combined Aquaculture and Aquaponics Course (4 days theory – various countries) TBC

Aquaculture Innovations contact details

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Alan Bell (Aquaponics Course April 2015; Aquaculture Course May 2015): Your knowledge is extensive, the course content is insightful, and your ability to convey that to a broad cross-section of types of attendees with widely disparate knowledge levels shows great people skills. The attention to detail you and your team exercise got every facet of the course right from content to catering - congrats.

Aquaculture System Management

Primary focus:

This Course is a fast paced introduction to running a fish farm. We go through an enormous amount of theory as well as conducting the corresponding practical exercises. The purpose of this Course is to expose delegates to the disciplines involved in successful fish farm management from the perspective of the potential investor or farm manager, and thus includes a section on Fish Farm economics and a look at some stylised examples.

Duration and Dates:

This Course is run over 3 days, dates: TBC

Agenda:

Aquaculture 3 Day System Management Course		
D a y 1	8 ⁰⁰ - 9 ⁰⁰	Industry Overview
	9 ⁰⁰ - 10 ³⁰	Facility Tour
	10 ³⁰ - 11 ⁰⁰	Tea
	11 ⁰⁰ - 12 ³⁰	Reproduction
	12 ³⁰ - 1 ³⁰	Lunch
	1 ³⁰ - 2 ³⁰	Earth Ponds and Cages
	2 ³⁰ - 3 ⁰⁰	Cages
	3 ⁰⁰ - 3 ³⁰	Tea
	3 ³⁰ - 4 ⁰⁰	Aquaponics
D a y 2	8 ⁰⁰ - 9 ⁰⁰	Feeding Fish
	9 ⁰⁰ - 10 ³⁰	Live Feed
	10 ³⁰ - 11 ⁰⁰	Tea
	11 ⁰⁰ - 12 ³⁰	Water Quality and Testing
	12 ³⁰ - 1 ³⁰	Lunch
	1 ³⁰ - 2 ³⁰	RAS
	2 ³⁰ - 3 ⁰⁰	RAS
	3 ⁰⁰ - 3 ³⁰	Tea
	3 ³⁰ - 4 ⁰⁰	Legislation
D a y 3	8 ⁰⁰ - 9 ⁰⁰	Tilapia
	9 ⁰⁰ - 10 ³⁰	Catfish and Trout
	10 ³⁰ - 11 ⁰⁰	Tea
	11 ⁰⁰ - 12 ³⁰	Fish Physiology and Health
	12 ³⁰ - 1 ³⁰	Lunch
	1 ³⁰ - 2 ³⁰	Stock Management
	2 ³⁰ - 3 ⁰⁰	Marketing
	3 ⁰⁰ - 3 ³⁰	Tea
	3 ³⁰ - 4 ⁰⁰	Economics and Examples

Who should attend:

Investors considering aquaculture and needing guidance on which route to follow; Fish farm managers; Fish farm supervisors.

Cost

R5 950 per delegate. This fee includes the Aquaculture Course Manual and notes, lunch and tea on each day of the Course.

Certification:

Delegates receive a Certificate of Attendance.



Practical Fish Farmer Course

Primary focus:

This Course is the ultimate Fish Farmer Training Course and aims to hone skills through repetition of the primary tasks needed to be a successful Fish Farmer. Each day we go through the typical activities that would be conducted on a commercial Fish Farm, along with the necessary theory for the delegate to understand and experience what it takes to successfully produce Fish in a Recirculating Aquaculture System. Although this Course focusses on tilapia farming, many of the skills learned will be of equal use to other forms of fish farming and some practice with other species is included.

The mantra of this Course is:

*I hear and forget
I see and remember
I do and I understand*

Duration:

This Course is run over 5 days to experience the primary components on a fish farm.

Practical Aquaculture Course Agenda					
Time	Day 1	Day 2	Day 3	Day 4	Day 5
8 ⁰⁰ - 9 ⁰⁰	Introduction	Spawn Catfish	Feed/WQ	Feed/WQ	Feed/WQ
9 ⁰⁰ - 10 ³⁰	Industry overview	Water Quality	RAS	Physiology	Tilapia
10 ³⁰ - 11 ⁰⁰	Tea	Tea	Tea	Tea	Tea
11 ⁰⁰ - 12 ⁰⁰	Breeding	Water Quality	RAS	Health	Catfish
12 ⁰⁰ - 12 ³⁰	Breeding tilapia	Feeding Fish	Legislation	Dissection	Trout
12 ³⁰ - 1 ⁰⁰	Breeding catfish	Feeding Fish	Feeding Fish	Feeding Fish	Feeding Fish
1 ⁰⁰ - 1 ⁴⁵	Lunch	Lunch	Lunch	Lunch	Lunch
1 ⁴⁵ - 2 ⁴⁵	Harvesting Eggs	Cages	Siphon tanks	Aquaponics	Economics
2 ⁴⁵ - 3 ³⁰	Select catfish	Earth ponds	Clean TBX	Sorting & Counting	Test
3 ³⁰ - 4 ⁰⁰	Stock management	Feeding Fish	Feeding Fish	Feeding Fish	Closure

Each day starts with water quality management and feeding, whereafter the tasks for that day are conducted between theory and further feeding events. We cover everything: health management, water quality, filtration, aeration, feeding, breeding, purging, transporting in bags vs tanks, stock management, siphoning, record keeping, dissections, handling fish, size sorting and counting.

Dates:

TBC (Aquaculture Academy, Grahamstown)

Who should attend:

Investors considering aquaculture and needing guidance on which route to follow; Fish farm managers; Fish farm supervisors.

Cost:

R9 950.00 per delegate. This fee includes the Aquaculture Course Manual and a main meal on each day of the Course.

Delegates also come away with charts on diseases and treatments, water quality management tools, System Management spreadsheets in Excel format, a Weekly Farm Management Program and other useful tools for managing a fish farm.

Feedback from previous Delegates:

Richard Wright (Singapore 2016): Solid content which will be used in years to come, the practical was a standout for me.

Marina Shiel (Zambia 2016): Your enthusiastic manner and enjoyment to share your passion and knowledge is wonderful, a Big thank you!

Martin Visser (KZN, SA 2016): Very Good, both for beginner as well as for those with a good understanding and past experience.

Dustin Blessman (USA): The course had the right amount of hands on work as well as book work. Food was Excellent!

Mohamed Atallah (Egypt): Very happy and if there is another opportunity I will do it again.

Chris Oldnall (South Africa): Excellent, well researched with lots of anecdotal information.

Didier Nyembo (DRC): Place well infrastructure to receive students and all put together to give a great insight to what fish farming is in Ponds VS RAS.

Adrian Wenger (Switzerland): Fantastic Training in all aspects!

Velimir Doncevic (Serbia): Dynamic, descriptive and interactive, 5 out of 5.

Piet van Graan (Botswana): Baie goed.

Tony Wagbafor (Nigeria): Very good, I am very happy.

Anton Seabrooke (Namibia): Comprehensive but not cluttered, relaxed and easy to impart knowledge to Trainees.

Grenville Wilson (South Africa): 5/5 Exceeded my expectations.

Joel Oloo (Kenya): Very resourceful on aquaculture in Southern Africa and the rest of the world.

Chenney Jordaan (Zambia): Absolutely great! Could not ask for better. It has been a wonderful experience, thank you.

Akewake Geremew (Ethiopia): Very well done and detailed, this is the best place to be trained.

Leon Jordaan (Windhoek): Good impression, got my money's worth and it helped me in planning my own fish farm by telling me about risks and rewards,

Nancy Dappa (Nigeria): All aspects and areas where covered and we have some materials to go back too. The course manual is very detailed. The venue is very comfortable with fewer students making the learning process easier. I will totally recommend it and the food was fabulous.

Derek Higgs (Johannesburg): Enjoyed the course, and felt that the practical is essential to the course, theory is one thing but the true experience is in the practical.



Aquaculture
INNOVATIONS

Commercial Aquaponics Course

Primary focus:

Aquaponics is the combination of fish aquaculture and plant hydroponics in a single system, where the waste of one system becomes the nutrient source for the next. With growing awareness of the need to reduce our footprint on this globe there is a massive amount of interest in developing systems that provide wholesome crops in a manner that is environmentally sustainable and energy efficient. Aquaponics is just such a solution. Delegates will be given the theory on aquaponics; both the plant and fish crop sides, along with practical demonstrations.

Agenda:

Commercial Aquaponics Course		
	Day 1	Day 2
8.00 am	Aquaponics overview	Feeding the fish
9.00 am	Facility tour	Live feeds
10.30 am	Tea	
11.00 am	System components	Selecting crops
12.00 pm	Legislation	Starting a system
12.30 pm	Lunch	
1.30 pm	Water quality	System Management
2.30 pm	Water quality	Crop health
3:00 pm	Tea	
3:30 pm	Marketing	Economics
4:00 pm	Closure	

Dates:

TBC (Pretoria)

Who should attend:

This Course is suitable for both commercial aquaponics farmers and people wanting to raise small amounts of fish and vegetable crops for own consumption.

Cost:

R4 750 per delegate. This fee includes the Aquaponics Course Manual, lunch and tea each day of the course.

Feedback from previous Delegates:

Mandy Hippe (Western Cape) – Very comprehensive, thought provoking and thorough

Michael Hippe (Western Cape) – Great without becoming boring or too theoretical

Mdletshe Thuthukani (KZN) – I was impressed with the whole course, it really opened my mind

Dylan Pons (JHB) – Sparked more interest, thus Great!

Donovan Boshoff (KZN) – Totally Worthwhile

Ben Grobler (Zimbabwe March 2016): Lecturer's subject knowledge far superior to anyone else.

David and Dorothy Wafer (North West Provenance March 2016): Much more informative and realistic than other courses out there.

Leone' Nowell (Eastern Cape March 2016): Professional, highly informative experience in a comfortable environment.



Aquaculture
INNOVATIONS

Aquaculture & Aquaponics Course

Primary focus:

This Course provides comprehensive theory on both Aquaculture and Aquaponics as is offered at various venues across the continent. The primary purpose of this Course is to provide delegates with plentiful information on which to base their selection of species and infrastructure types. This Course is a synthesis of each of the Aquaculture and Aquaponics Courses for those who need a lot of information quickly!

Agenda:

Aquaculture & Aquaponics Course Agenda				
	Day 1	Day 2	Day 3	Day 4
8 ⁰⁰ - 9 ⁰⁰		Feeding fish	Stock management	Tilapia
9 ⁰⁰ - 10 ⁰⁰	Industry overview	Live feed		Catfish, Trout
10 ⁰⁰ - 10 ³⁰	Tea			
10 ³⁰ - 11 ³⁰		Water quality	Aquaponics overview	Harvesting & transport
11 ³⁰ - 12 ³⁰	Reproduction	WQ testing	Aquaponics components	Environmental impacts
12 ³⁰ - 1 ³⁰	Lunch			
1 ³⁰ - 2 ³⁰	Earth Ponds	RAS	Selecting crops	Marketing
2 ³⁰ - 3 ⁰⁰	Cages	RAS	Starting a new system	Economics & examples
3 ⁰⁰ - 3 ¹⁵	Tea			Closure
3 ¹⁵ - 4 ⁰⁰	Fish Physiology	Fish Health	Aquaponics management	

Dates & Venues:

TBC

Who should attend:

This Course is aimed at individuals who are considering a career or investment in Aquaculture or Aquaponics and need credible information to guide and focus their decision regarding the choice of infrastructure types to use and the species to produce. We cover an enormous amount of information in the 4 days, supported with video clips and photographs to detail and highlight certain aspects.

Cost:

\$700 per delegate

This fee includes the Aquaculture Course Manual, Aquaponics Course Manual, as well as lunch and tea each day of the course.

Aquaculture Academy Trainer

Leslie Ter Morshuizen



All these Courses are conducted by Leslie Ter Morshuizen who is synonymous with fish. As a child he raised tilapia in the dams on the farms in the neighbourhood, and bred ornamental fish in tanks as a source of pocket money. On completing school he spent a year commercial fishing prior to spending 6 years at Rhodes University where he obtained a MSc degree in Ichthyology, and Provincial Colours for spearfishing. On graduating Leslie managed an ornamental fish farm for two years and was the Production Manager of a national koi farming group for a further two years, whereafter he started his own business as an Aquaculture Consultant.

In his private capacity, and in collaboration with Rhodes University or the JLB Smith Institute of Ichthyology (now the South African Institute for Aquatic Biodiversity), the author has written several scientific, and a great number of popular publications. He has presented papers at conferences, presented proposals to State and Federal Ministers in Namibia, Nigeria, Madagascar, Mauritius & Mozambique, and has undertaken a substantial number of aquaculture consultancies. Since 2004 he has also been heavily involved in Aquaculture Training within the sub-region.

More recently he founded both the Aquaponics Association of Southern Africa and the Catfish Growers Association to foster the development of the two important sectors.

Leslie's approach is to provide Designs and Training that are based on the latest international trends within the Aquaculture Industry, made appropriate for African conditions. Integrity, credibility and reliability are the virtues he strives to uphold in every interaction.

