

# 2012 Ponds, Fountains & Birdbath Products



**Providing Aquatic Solutions Since 1976** 

Understanding the Nitrogen Cycle & Your Pond	4-5
Water Clarifiers (Liquid) - MICROBE-LIFT/PL	6-8
Algae Control	9
Pond Cleaners	10
Seasonal Products	11
Sludge Removers and Nitrifiers	12
Barley Straw Products	13-14
Water Clarifiers (Dry)	15-16
Fish Health	
Pond Salt	21
Sabbactisun & Parazoryne	22-23
Mosquito Control	24
Aquatic Plant Products	25-26
Chemical Water Treatments	27-30
Skimmer & Filter Media Treatments	31-35
Pond Professional	36-37
Lake Management & Contractor Products	38
Test Strips	39
Legacy Pond Fish Food	40-47
Birdbath/Fountain & Statuary	48-49
POP Dealer Partnership Program	50-59
Web Site	60





Take advantage of our FREE online Dealer Directory. Sign up at: www.MicrobeLift.com/register.

### **HOW TO CALCULATE GALLONS IN A POND:**

Rectangular Pond - Length (in feet) x Width x Depth x 7.5 Circular Pond - 3.14 x r2 x Depth x 7.5 (r2 = radius squared or half the pond diameter x itself)



- One company advertises "Better, Faster, Stronger Bacteria".
- Another company advertises "More Species of Bacteria".
- Another company advertises "57 + 1 Strains of Bacteria".
- Another company has a drawing of KOI with clothes pins on their noses saying, "What stinks in here?"

Let's settle the comparisons. **NOW SEE FOR YOURSELF** what the "stink" is all about. It's about us, **Microbe-Lift/PL**, the #1 most requested beneficial bacteria by brand name, because of proven superior performance.

Now for the first time **SEE** microscopic video comparisons of Microbe-Lift/PL vs. other brands (we won't even call them competitors). Simply go to **www.MicrobeLift.com** hit the icon and see the Microbe-Lift difference!

It's not about the number of species, it's not about bacterial counts, it's about technology and it's about time!



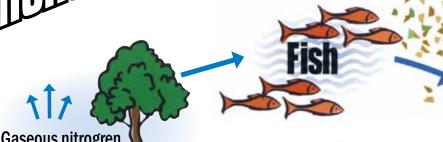
SEETHE
DIFFERENCE
FOR YOURSELF
ON VIDEO



Other Brands, hardly ANY activity!

# **Cycles Fish Ponds Fast**

**Understanding the Nitrogen Cycle & Your Pond** 



Gaseous nitrogren into the air

Nitrogen Gas (N<sub>2</sub>)

## Denitrification

The reduction of nitrate in filtered pond anoxic zones



MICROBE-LIFT/PL (already added in step #1) contains denitrifiers that function without oxygen. These select microbes can remove

pond nitrates by converting nitrate to nitrogen gas that bubbles harmlessly into the atmosphere under the anoxic conditions in pond filters and biofilms.



Nitrate (NO<sub>3</sub>)

is a food source for plants & algae

steps to speed the removal of organic waste. and nitrate for a clear, clean, nontoxic pond!

## Fish Waste plus **Uneaten Food Protein** & Dead Plant Matter

are broken down by the pond biology and ammonia is released

### step #1: add MICROBE-LIFT/PL

Speeds the removal of all organic waste matter in ponds by adding a select group of microbes that increase the rate of organic breakdown and improve filter performance.



### step #2: add ML/NITE-OUT II

Provides the necessary nitrifying bacteria (nitrosomonas and nitrobacter) required for the biological nitrification process, and assures the continued removal of toxic ammonia!



### step #3: use ML/KH TEST KIT

### (when needed) step #4: add **MICROBE-LIFT/KH Booster**

Supplies the necessary carbonate alkalinity required by nitrifying microorganisms. If carbonate alkalinity is NOT present, the pond pH will be unstable and ammonia removal may cease. ML/KH Test Kit also provides the necessary carbon source for nitrifying bacteria.



Measures the presence of necessary carbonate alkalinity. When below 50ppm, add ML/KH

# Nitrobacter sp.



### MICROBE-LIFT/NITE-OUT II

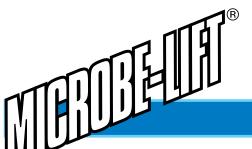
(already added in step #2) provides the necessary Nitrobacter bacteria required for the oxidation of Nitrite to Nitrate in the pond filter!

# Nitrosomonas sp. (contained in ML/NITE-OUT II)

converts ammonia to Nitrite (NO<sub>2</sub>)



Booster.



# **Cycles Fish Ponds Fast**

**Understanding the Nitrogen Cycle & Your Pond** 

### MICROBE-LIFT®/PL & MICROBE-LIFT®/Nite-Out II



is the only natural pond treatment program to cycle and balance your pond fast using a safe, microbial, non-chemical biological process which naturally: controls and eliminates waste organic matter, enhances water quality and reduces and controls toxic ammonia, nitrite and nitrate.

Just follow these simple steps:

**Step #1:** Add **MICROBE-LIFT®/PL** to your pond to break down and degrade all waste organic matter, assuring improved environment for aquatic life and plants. **MICROBE-LIFT®/PL** seeds pond water, filters and establishes necessary bio-films in filters and on pond surfaces removing unwanted waste matter and clarifying pond water fast! **MICROBE-LIFT®/PL** will also reduce and eliminate any pond odor.

As the organic waste matter in your pond - i.e., dead plant life, excessive fish food and fish waste - is broken down by pond biology, the waste matter is converted to ammonia in a process called *Ammonification*. As the ammonia levels build in your pond, it can become toxic to fish and marine life and must be biologically removed *quickly*. *Nitrification* - the natural, biological ammonia removal process - is done by a group of microbes called *nitrifying bacteria*. Nitrifying bacteria are very slow to grow (requiring as much as 18 hours for a single cell division compared to every 45-60 minutes for waste degraders) and often require weeks to naturally develop the necessary population to convert all the ammonia produced in your pond.

**Step #2:** Use **MICROBE-LIFT®**/**Nite-Out II** to quickly establish the necessary nitrifying cultures and the ammonia removal process in your pond. Just add **MICROBE-LIFT®**/**Nite-Out II** and these cultures will grow and convert the toxic ammonia to nitrite, then to nitrate. **MICROBE-LIFT®**/**Nite-Out II** also contains *Nitrosomonas*, which convert ammonia to nitrite, and *Nitrobacter*, which convert nitrite to nitrate.

In addition, you should know the term *Carbonate Alkalinity* because the biological nitrification process that removes toxic ammonia from your pond in order for it to cycle properly requires a source of inorganic carbon. It takes 7.1 pounds of carbonate alkalinity for every pound of ammonia removed from your pond water. If carbonate alkalinity is *not* available in pond water, it's just like your car running out of gas! The nitrification process will stop, or may not even get started. To ensure toxic ammonia is removed by the necessary nitrifying bacteria, you must test your pond water for adequate carbonate alkalinity until there is a minimum of 50 ppm. Then add **MICROBE-LIFT®/Nite-Out**If to ensure rapid and complete ammonia removal by the nitrifying microbes.

Step #3: Use MICROBE-LIFT®/KH Test Kit to test the levels in your pond.

**Step #4:** Use **MICROBE-LIFT®/KH Booster** to supply the necessary carbonate alkalinity required by nitrifying microorganisms. If carbonate alkalinity is NOT present, the pond pH will be unstable and ammonia removal may cease.

### **MICROBE-LIFT®/PL and Denitrification**

**MICROBE-LIFT®/PL** provides a real value to your pond's environment. In addition to being one of the BEST products you can use to speed the removal of unwanted, slow-to-degrade organic matter from your pond environment, the novel cultures in **MICROBE-LIFT®/PL** assist in the removal of nitrate from pond water via a process called *Denitrification*.

While some pond nitrate is removed by plants and partial water changes, the most effective way to control nitrate removal is by biological denitrification. In this process, nitrate removal takes place in the anaerobic areas, such as those found in pond filter bio-films. **MICROBE-LIFT®/PL** cultures are also *denitrifying microbes* that provide an important nitrate removal pathway assisting in the removal of nitrate via denitrification. **MICROBE-LIFT®/PL** includes high-rate denitrifiers that convert nitrate to nitrogen gas under an anaerobic condition that exists in filters and pond surface bio-films, reducing the nitrate level in your pond. It is noteworthy that algae can use nitrate as a nutrient.

MICROBE-LIFT®/PL & MICROBE-LIFT®/Nite-Out II are the answer to a *Natural, Clean, Clear NON-TOXIC* Pond Environment! You can rely on these two novel, biological products to enhance water quality by removing slow-to-degrade waste matter, and removing and controlling ammonia, nitrite and nitrate via their natural, non-chemical biological process.

# 

# Ponds, Fountains & Birdbaths

# All People Are Created Equal... All Parteria Are Created Equal

### How is MICROBE-LIFT® different from other biological products for ponds?

There are a number of important differences that make MICROBE-LIFT® far superior to other bacterial products. Here are just a few:

- 1. MICROBE-LIFT/PL® contains photosynthetic bacteria which can be *very* beneficial in balancing the ecology of a pond. These bacteria can use sunlight as a source of energy, taking some of the load off of the aerobic heterotrophs. This is why MICROBE-LIFT/PL® has its characteristic purple/red color. We DO NOT add food coloring or other types of pigments to our product! Like all photosynthetic organisms, photosynthetic bacteria need a pigmented material to absorb sunlight. *Chlorophyll* is responsible for the green hues in plants. *Carotenoids* give photosynthetic bacteria its purple/red hue. Initially, when we start to grow our product, the medium is clear. But after a few days of exposure to sunlight as if by magic the bacteria synthesize this natural pigment and it turns purple/red. Since photosynthetic bacteria are so beneficial to ponds, other products claim to contain these bacteria too. However, a product that is CLEAR CANNOT CONTAIN PHOTOSYNTHETIC BACTERIA because light passes through clear liquid...so it is simply impossible!
- **2.** Ecological Laboratories, Inc. is the basic manufacturer of MICROBE-LIFT/PL®. Many other companies DO NOT produce their own bacteria. Their products are *stock products*: mass-produced by large culture manufacturers, sold for any number of applications and packaged under a variety of labels. Most of these products contain only aerobic heterotrophs and facultative anaerobes. While these may provide some benefit in a pond environment, they CANNOT balance the pond's ecosystem the way MICROBE-LIFT/PL®'s consortium of aerobic heterotrophs, facultative anaerobes plus photosynthetic, anaerobic and chemosynthetic organisms can.
- **3.** MICROBE-LIFT/PL® is a virtual ECOSYSTEM IN A BOTTLE! It is *grown in the container in which it is sold* because the organisms grow synergistically the way they have to work in your pond together. Most products from mass producers of bacteria are grown as individual strains in large tanks, or, if they are a dry product, in tray fermentors. Then they are blended before packaging with very little knowledge of how they will interact in the pond environment or any environment for that matter.
- **4.** A single box of MICROBE-LIFT/PL® is so versatile that you would have to purchase three or four of another company's individual products to achieve the same results! So while the price of MICROBE-LIFT/PL® may be a little higher than some of our competition, you can end up saving three to four times what you might have spent!
- 5. Upon being asked why he recommends MICROBE-LIFT/PL® and what it can do for a pond, the most successful salesman from one of our best dealers simply replied, "MICROBE-LIFT/PL® cuts your maintenance in half!" Simple, very effective and true!



www.MicrobeLift.com

# The Science and Success Behind the Smell

hen you open a bottle of MICROBE-LIFT/PL there is a 'rotten egg' smell. The odor is totally harmless, it dissipates within seconds, and it is there for a very good reason. The product is designed to naturally produce hydrogen sulfide and to serve important functions. The hydrogen sulfide acts like an anesthesia to put the bacteria to sleep. That's why our live bacteria have the longest shelf life on the market. When you open the bottle and pour MICROBE-LIFT/PL into pond, the hydrogen sulfide flashes off and dilutes in the water allowing the bacteria to wake up and become active again.

# THE MICROBE-LIFT SATISFACTION GUARANTEE

If MICROBE-LIFT does not meet the standards as stated in our directions, we will replace the product ABSOLUTELY FREE, to assure success.

ALL MICROBE-LIFT PRODUCTS
ARE UNCONDITIONALLY
GUARANTEED TO ASSURE YOUR
CUSTOMER'S SATISFACTION.

Convenient Sizes

So, why buy a product that smells like rotten eggs?

# BECAUSE IT'S SIMPLY THE BEST PRODUCT ON THE MARKET!

MICROBE-LIFT IS THE
PRODUCT LINE MOST
OFTEN REQUESTED
BY BRAND NAME TO
ESTABLISH, RESTORE
AND MAINTAIN THE
NATURAL BIOLOGICAL
AND CHEMICAL
BALANCE OF YOUR
POND IN ALL SEASONS.

# **Specially Formulated for Decorative Fish Ponds, Lagoons & Smaller Water Features**

- · Creates a cleaner environment for your pond, promoting faster fish growth
- Reduces ammonia nitrogen levels
- Dissolves away organic sludge
- Seeds and maintains biological filters
- Significantly reduces noxious odors caused by dead algae, fish fecal matter and urine
- · Reduces hydrogen sulfide, which creates strong, offensive odors
- Reduces biological oxygen demand (B.O.D.)
- · Reduces buildup of bird droppings, fish feed and dead leaves
- Breaks down dead algae
- Improves dissolved oxygen levels
- Contains photosynthetic bacteria which reduces cloudy water by promoting flocculation and settling of organic and inorganic particles
- Effective over a wide range of pH conditions
- Can be used at 45° F

# MICROBE-LIFT® Water Clarifiers (Liquid)





### PL PONDS & LAGOONS (VEGETATIVE CULTURES)

						7 7 7 7	
	SIZE	ITEM #	TREATS		APPLICAT	ION RATE	
ĺ	16 OZ.	10PLP	80 GAL POND-11 MOS.	Pond Vol. (Gals.)	1st App. (Purge)	Next 4 Wks. (Once per Wk.)	Mainte- nance
ı			200 GAL POND - 8 MOS.	10-20	2 oz.	1 oz.	1 oz.
ı	32 OZ.	10PLQ	500 GAL POND - 11 MOS.	21-50	4 oz.	1.5 oz.	1.5 oz.
П	02 02.	101 EQ	1,000 GAL POND - 8 MOS.	51-80	6 oz.	1.5 oz.	1.5 oz.
П	CAL	10DLC4	5,000 POND - 21 MOS.	81-250	8 oz.	2 oz.	2 oz.
П	GAL	10PLG4		251-500	10 oz.	3 oz.	3 oz.
П				501-1,000	14 oz.	5 oz.	5 oz.
ш	GAL	10PLG6	5,000 POND - 21 MOS.	1,001-1,500	18 oz.	6 oz.	6 oz.
н			ŕ	1,501 - 2,500	24 oz.	8 oz.	8 oz.
				2,501 - 3,500	28 oz.	10 oz.	10 oz.
	5 O A I	40DL VEO	OFF LADEL	3,501 - 5,000	32 oz.	12 oz.	12 oz.
	5 GAL	10PLX5G	SEE LABEL	5,001 - 7,500	40 oz.	16 oz.	16 oz.
				7,501 - 10,000	48 oz.	20 oz.	20 oz.
	32 OZ.	PL32F	500 GAL POND - 11 MOS. 1,000 GAL POND - 8 MOS.	BILINGUAL	FRENCH &	ENGLISH PACKAG	GING



A Proprietary Formulation for larger rural lakes and ponds

- Reduces ammonia nitrogen levels
- Reduces odors
- Breaks down organic sludge
- Contains photosynthetic bacteria



SIZE	ITEM #	TREATS	APPLICATION RATE			
GALLON 10HCG4	1011004	10HCG4	Pond Volume (Gals.)	1st App. (Purge)	Next 4 Weeks (Once per Week)	Maintenance 1 x per month
			10,001-50,000	64 oz.	24 oz.	24 oz.
			50,001-100,000	1 gal.	32 oz.	32 oz.
			100,001-300,000	2 gals.	0.5 gal.	0.5 gal.
		50,000 GAL. POND - 6 MOS.	300,001-500,000	4 gals.	1 gal.	1 gal.
5 GALLON	10HCX5G		500,001-750,000	6 gals.	2 gals.	2 gals.
			750,001-1,000,000	8 gals.	3 gals.	2.5 gals.

# MICROBE-LIFT® EPA Registered Algae Control



### **ALGAWAY 5.4**

- •Eliminates many types of algae in the pond
- •For use with fish and live plants
- Liquid formulation
- •EPA Registered

SIZE	ITEM#	TREATS	APPLIC	ATION RATE
8 OZ.	ALGA08	2,839 GALS.	Water Volume	Amount
16 OZ.	ALGA16	5,678 GALS.	50 gallons	30 drops
32 OZ.	ALGA32	11,356 GALS.	120 gallons	2 tsp. (2 capfuls)
GALLON	ALGAGAL	45,424 GALS.	360 gallons	2 Tbsp. (6 capfuls)



### **GREEN CLEAN**

- •Immediate filamentous or "string" algae control for fountains, ornamental ponds and water gardens
- •Keeps water clean
- •EPA Registered

SIZE	ITEM #	TREATS	APPLICATION RATE	
2.5 LBS.	GREEN02	4,000 GALS.	POND SIZE	CURATIVE RATE
8 LBS.	GREEN08	16 000 CALC	50 gallons	1 Tbsp.
o LDS.	GREENUO	16,000 GALS.	100 gallons	1.5 Tbsp.
00 LDC	GREEN20	40 000 041 0	500 gallons	0.5 Cup
20 LBS.	GREENZU	40,000 GALS.	1,000 gallons	1 Cup
FOLD	GREEN50	100,000 GALS.	5,000 gallons	5 Cups
50 LB.			10,000 gallons	10 Cups

# MEAN GREEN ALGAE TEAM - ALGAECIDE AND MICROBE-LIFT/PL BACTERIAL WATER CLARIFIER

- •Immediate filamentous or "string" algae control for fountains, ornamental ponds and water gardens
- •Keeps water clean
- Breaks down dead algae
- •Small contains: 1 ML/PL 32 oz. & 1 Green Clean 2.5 lbs. Large contains: 1 ML/PL gallon & 1 Green Clean 8 lbs.
- •Green Clean is EPA Registered

SIZE	ITEM #	TREATS	APPLICATION RATE
SMALL	MGATSM	Small - Medium ponds & water features	Can anah menduat lahal
LARGE	MGATLG	Large - XLarge ponds & water features	See each product label

# **MICROBE-LIFT® Pond Cleaners**



### PONDLESS WATERFALL KIT

# MICROBE-LIFT/ PL & MICROBE-LIFT/ OXY POND CLEANER

Will safely and effectively break down unsightly debris, prevent odor and deep clean rocks in your pondless waterfall!

#### Item #PWK





### **OPC OXY POND CLEANER**

Uses the power of oxygen to safely yet immediately break down accumulated debris on rocks, streams and waterfalls.

Helps prevent odors. Cleans decks, planters and lawn furniture too.

SIZE	ITEM #	TREATS	APPLICATION RATE
2 LBS.	OPCSM	UP TO 10,000 GALS.	To treat areas with debris buildup,
8 LBS.	OPCMD	UP TO 40,000 GALS.	sprinkle over area needing treatment.  Make direct contact but avoid live plants
18 LBS.	OPCLG	UP TO 90,000 GALS.	where possible.
45 LBS.	OPCXL	UP TO 225,000 GALS.	
2 LBS.	OPCSMF	UP TO 10,000 GALS.	BILINGUAL FRENCH & ENGLISH PACKAGING



Loosens up and cleans away accumulated solids with the cleaning action of natural biodegradable soy extracts.

Great for liners, rocks, ornaments and pumps

Non-toxic to pumps, aquatic fish and plant life like most cleaners, detergents or surfactants

SIZE	ITEM #	APPLICATION RATE
32 OZ.	SC32	<ul> <li>Apply to surface</li> <li>Use soft cloth and scrub in circular pattern</li> <li>Allow to stand for 1 minute</li> <li>Rinse with clean water</li> <li>For stubborn stains, repeat as necessary</li> </ul>

# **MICROBE-LIFT® Seasonal Products**



### **SPRING/SUMMER CLEANER**

- Helps jump start your pond in the spring
- Reduces buildup of dead leaves and cellulosic organic sediment

SIZE	ITEM # TREATS APPLICATION RATE								
		UP TO 5,000 GAL POND FOR 4 WEEKS	Dand Val. (Cala.)	2 oz. Packets					
0.000.007			Pond Vol. (Gals.)	Wk. 1	Wk. 2	Wk. 3	Wk. 4		
PACKETS	8 PCS - 2 OZ. 10XSSCX1		<b>SSLX1</b> /	80-500	1	1	1	1	
FAURLIS				TOND FOR 4 WEEKS	1 OND 1 ON 4 WEEKS	501-1,000	2	1	2
			1,001-5,000	2	2	2	2		
8 PCS - 2 OZ. PACKETS	SSCF	UP TO 5,000 GAL POND FOR 4 WEEKS	BILINGUAL FR	ENCH & I	ENGLISH	PACKAG	ING		

### **AUTUMN/WINTER PREP**

MICROBE-LIFT/AWP helps accelerate the decomposition of leaves, sediment and other organic matter during the fall and winter months. MICROBE-LIFT/AWP will also help jump start your pond to a healthier environment in the spring. MICROBE-LIFT/AWP is a two-part system of LIQUID bacteria and DRY, water soluble packets containing a blend of cellulase enzymes, cellulase-producing bacteria and a cold weather bacteria. The cellulase enzymes, along with the cellulase-producing bacteria, are the key to accelerating the breakdown of leaves, organic sediment and sludge all winter long. The cold weather bacteria and liquid bacteria take care of the initial breakdown by-products.

- Continues to provide sustained biological activity even in water temperatures under 40° F (4° C)
- Contains psychrophilic strains (cold weather bacteria)
- If frozen, bacteria will remain effective after thawing out
- Effective in darker conditions (under ice and snow)
- Helps to maintain a healthy immune system for your fish during the winter months

	SIZE	ITEM#	TREATS		APP	LICATION RATE		
	22.27			Pond Vol. (Gals.)	1st Application Dosage (oz.)	Next 3 Weeks Once per Week Dosage (oz.)	Maintenance Once per Mo. Dosage (oz.)	Packets per Month
	32 OZ.			80-200	4 oz.	2 oz.	2 oz.	1
	BACTERIA + 4 PCS - 2 OZ.	AUTPREP	SEE LABEL	201-500	6 oz.	3 oz.	3 oz.	1
¥	PACKETS			501-1,000	8 oz.	4 oz.	4 oz.	1
.3	TAUKLIS			1,001-2,500	12 oz.	6 oz.	6 oz.	1
				Note: Simply toss	1 water soluble		packet into your	pond every
٠					Y	month		
4		AUTPREPGK	-	2,501-5,000	16 oz.	8 oz.	8 oz.	2
F.				5,001-7,500	20 oz.	10 oz.	10 oz.	2
	0.411.011			7,501-10,000	24 oz.	12 oz.	12 oz.	2
	GALLON			10,001-25,000	48 oz.	20 oz.	20 oz.	3
	BACTERIA + 8 PCS - 2 OZ.		SEE LABEL	25,001-50,000	96 oz.	40 oz.	40 oz.	3
	PACKETS			50,001-100,000	1 gal.	60 oz.	60 oz.	3
	TAUKLIS			100,001-300,000	2 gal.	96 oz.	96 oz.	4
				Note: Simply to		d number of water	soluble cellulas	se enzyme
				packets into your pond every month				
	32 OZ. BACTERIA + 4 PCS - 2 OZ. PACKETS	AWP32F	SEE LABEL	BILINGUAL FRENCH & ENGLISH PACKAGING				



### **EZ STARTER KIT**

This kit contains a full season's bacteria at a discounted price. The handy carrying case is made from heavy corrugated board.

Contains:

- 1 32 oz. PL
- 1 Spring/Summer Cleaner
- 1 32 oz. TheraP
- 1 32 oz. Autumn/Winter Prep

SIZE	ITEM #	TREATS	APPLICATION RATE
1 KIT HAS 4 PCS.	MLEZSPK	SEE LABEL	SEE EACH PRODUCT LABEL

# MICROBE-LIFT® Sludge Remover and Nitrifiers

### **SA SLUDGE-AWAY**

Sludge Away is formulated specifically for the removal of organic bottom solids that are slow to degrade. Works faster at warm water temperatures, however may be used effectively at any temperature year - round.

Recommended for use with all MICROBE-LIFT bacteria and enzyme products. Provides "rapid & natural sludge and muck removal". 80% faster than competitive products. Binds phosphate. Helps improve pond clarity. 100% natural active ingredients. Disperses quickly. Organic and

microbial based.

SIZE	ITEM #	TREATS	APPLICATION RATE
32 OZ.	MLXSAQ	500 GAL POND - 6.5 WKS.	
GALLON	MLXSAG4	2,500 GAL POND - 5 WKS.	1 oz. per 100 gals. of pond water every week until sludge is eliminated
GALLON	MLXSAG6	2,500 GAL POND - 5 WKS.	
5 GALLONS	MLXSA5G	5,000 GAL POND - 12 WKS.	Maintenance: Treat with MICROBE-LIFT/SA monthly or as necessary thereafter
32 OZ.	SA32F	500 GAL POND - 6.5 WKS.	BILINGUAL FRENCH & ENGLISH PACKAGING

### **NITE-OUT II Specially Formulated for Rapid Ammonia & Nitrite Reduction**

MICROBE-LIFT Nite-Out II is designed specifically for ponds that contain aquatic life. Its highly specialized microbial consortium of nitrifying cultures are specially formulated to eliminate ammonia via a natural biological process termed nitrification. The cultures contained in MICROBE-LIFT Nite-Out II will establish, promote or stabilize and maintain nitrification in pond waters, eliminating the toxic effect of ammonia.

MICROBE-LIFT Nite-Out II liquid nitrifying bacteria contains select strains of Nitrosomonas, Nitrospira and Nitrobacter. Nitrosomonas convert ammonia to nitrite and Nitrobacter and Nitrospira convert nitrite to nitrate.

NITRIFICATION

Ammonia

Nitrosomonas sp. Nitrobacter sp. NH3 →  $NO2 \rightarrow$ NO3

Nitrite

Nitrate

- Initiates nitrification
- Promotes stable nitrification
- Provides stable cold weather nitrification
- Safe for use around plants and animals

ML/NITE-OUT II comprises select microorganisms that are autotrophic - able to use carbon dioxide as the sole source of carbon - and are relatively slow-growing, requiring specific conditions for optimum growth with typical cell division rates from 8-16 hours. Their performance and rate of growth are impacted by the environmental parameters required for nitrification. They are also highly oxygen-sensitive, requiring high dissolved oxygen levels (greater that 2 mg/L) to achieve maximum growth rates. Nitrite is produced by beneficial bacteria in the pond and the oxidation of harmful waste ammonia excreted by fish. Even the

th	hough nitrite is not as toxic as ammonia, it is still very damaging to the health of fish.						
ı	SIZE ITEM # TREATS		APPLICATION RATE				
	16 OZ.	NITE16	500 GAL POND - 14 MOS.	Pond Vol (Gals.)	1st App (Purge)	Next 4 Wks (1 x wkly)	Maintenance (1 x monthly)
				80-500	1 oz.	0.5 oz.	1 oz.
	32 OZ.	NITE32	2,500 GAL POND - 5 MOS.	501-2,500	5 oz.	2.5 oz.	5 oz.
	GALLON	NITEGAL	5,000 GAL POND - 11 MOS.	2,501-5,000	10 oz.	5 oz.	10 oz.
	16 OZ.	NITE16F	500 GAL POND - 14 MOS.				
	32 OZ.	NITE32F	2,500 GAL POND - 5 MOS.	BILINGUAL FRENCH & ENGLISH PACKAGING		PACKAGING	
	GALLON	NITEG1F	5,000 GAL POND - 11 MOS.				



Use with MICROBE-LIFT/PL for quick cycling of ponds! Shelf life 12-18 months

### BARLEY STRAW CONCENTRATED EXTRACT







An environmentally responsible, costefficient pond conditioner that is a clean and easy, natural and organic approach to a healthy pond environment

# Barley Straw Concentrated Extract

A LIQUID Extract Especially Helpful Where Bottom Drains are Present!

- Goes to work on contact
- Releases decomposition by-products immediately
- Not harmful to aquatic life, plants humans or pets
- One bottle is equal to multiple barley straw bales
- Can be used all year round
- No messy residual

When a pond's ecosystem is mature and balanced, the water is usually clear and healthy for aquatic life. This maturation process is a function of the microbiological and chemical properties of the water.

### NATURAL CHEMICAL MATURATION

MICROBE-LIFT/BARLEY STRAW LIQUID & DRY formulations help to mature the pond with natural chemicals just as a pure mountain stream matures through the years by the introduction of natural breakdown products from trees, plants, etc. These natural breakdown products often include humic and fulvic acid and organic acids that have a natural ability to sequester, or tie up, inorganic compounds so their concentrations in the pond don't get to levels that would unbalance the pond's ecosystem. These substances can also lead to natural purification of the pond through a slow release of hydrogen peroxide as they react with sunlight. The hydrogen peroxide is produced at levels that help purify the water while not having any adverse effects on desirable aquatic life. The sequestering, in conjunction with microbiological cycling, provides a stable natural ecosystem in your pond.

### **BIOLOGICAL MATURATION**

The microbiological maturation process involves development of symbiotic populations of bacteria which stabilize the critical organic and inorganic components of the pond. The microorganisms do this through their ability to promote "biogeochemical cycles" - including carbon, nitrogen and phosphorus cycles - elements critical to all forms of aquatic life. By stabilizing these components, the bacteria prevent pollution of the pond. It can take some time to accomplish this "biological maturation" in a man-made pond and may never occur as the maturation process is constantly interrupted by certain pond practices like cleaning out the pond. The process can be accelerated significantly through the use of MICROBE-LIFT/PL - a virtual "ecosystem in a bottle" - and mimics the complex interdependent populations in a mature pond.

# MICROBE-LIFT® Barley Straw Products



#### **BARLEY STRAW PELLETS+**

- Less mess and cost than bales of barley
- Clarifies ponds organically no harmful chemicals
- Barley Straw Pellets are easier to apply to your pond than bales, pillows or pads
- Easier to tailor dosage
- Decomposes quickly and works year-round to soften pond water and reduce negative effects of phosphate.

SIZE ITEM# TREATS				APPLI	CATION R	ATE	
		150 GALS 19 MOS.	Pond Vol.	CLEAR	WATER	TURBIC	) WATER
2.2 LBS.	10BSPP2.2	400 GALS 8 MOS.	Gals.	0Z	mL.	OZ.	mL.
			80	2	70	4	140
			100	3	90	6	180
4.4 LBS.	10BSPP4.4	500 GALS 12 MOS.	150	4	130	8	260
4.4 LDS.	1000554.4	800 GALS 8 MOS.	200	6	175	12	350
			300	9	260	18	520
		1,000 GALS 14 MOS. 2,500 GALS 6 MOS.	400	12	350	24	700
10.5 LBS.	10BSPP10.5		500	15	425	30	850
10.5 LDS.	10037710.5		600	18	525	35	1,000
			700	21	600	40	1,200
				24	700	48	1,400
25 LBS.	BPPX25	SEE LABEL	1,000	30	870	60	1,750
ZJ LDJ.	DEFAZO	OLL LADLL	1,500	45	1,300	90	2,600
			2,000	60	1,700	120	3,400
			2,500	70	2,000	140	4,000
40 1 00	DDDV 40	0551 AD51	4,000	95	2,750	210	5,500
40 LBS.	BPPX40	SEE LABEL	5,000	130	3,750	280	7,500
			Apply every six weeks				



### **CONCENTRATED BARLEY STRAW EXTRACT**

- Easy to use Concentrated Barley Straw Extract goes to work immediately and can be used all year long.
- Specially formulated to naturally balance pond water and improve clarity
- Easy to use Tip and Pour container allows for convenient measuring for precise usage. No messy residue.



### **CONCENTRATED BARLEY STRAW EXTRACT + PEAT**

- Easy to use Concentrated Barley Straw Extract goes to work immediately and can be used all year long.
- Specially formulated to naturally balance pond water and improve clarity
- Includes liquid peat to help maintain an ideal pH
- Easy to use Tip and Pour container allows for convenient measuring for precise usage. No messy residue. Safe for aquatic life, plants, humans or pets.

SIZE	ITEM#		APPLICATION	N RATE	
0.07	MLCBSE250	Pond Vol.	Week 1	Week 2, 3 & 4	Maintenance 1x per month
8 OZ.	WILUBSEZSU	Gals.	0Z	0Z	0Z
		up to 500	2	0.50	0.75
		501-1,000	3	0.75	1.25
16 OZ.	MLCBSE500	1,001-1,500	4	1.00	1.50
		1,501-2,000	6	1.25	1.75
		2,001-3,000	8	1.50	2.25
32 OZ.	MLCBSE1L	3,001-4,000	10	2.00	3.00
		4,001-5,000	12	2.50	3.50
		5,001-6,000	16	3.00	4.00
64 OZ.	MLCBSE2L	6,001-7,000	20	3.50	4.50
		7,001-8,000	24	5.00	6.00
GALLON	MLCBSEG4	8,001-10,000	32	6.00	8.00
16 OZ.	BSE16F	BILINGUAL F	RENCH & E	NGLISH PA	CKAGING

SIZE	ITEM #		APPLICATION	ON RATE	
0.07	BSEP08	Pond Vol.	Week 1	Week 2, 3 & 4	Maintenance 1x per month
8 OZ.	BSEPUS	Gals.	0Z	0Z	0Z
		up to 500	2	0.50	0.75
		501-1,000	3	0.75	1.25
16 OZ.	BSEP16	1,001-1,500	4	1.00	1.50
		1,501-2,000	6	1.25	1.75
		2,001-3,000	8	1.50	2.25
32 OZ.	BSEP32	3,001-4,000	10	2.00	3.00
		4,001-5,000	12	2.50	3.50
		5,001-6,000	16	3.00	4.00
64 OZ.	BSEP64	6,001-7,000	20	3.50	4.50
		7,001-8,000	24	5.00	6.00
GALLON	BSEPG4	8,001-10,000	32	6.00	8.00

# MICROBE-LIFT® Water Clarifiers (Dry)

NO FILLERS!
100% ACTIVE INGREDIENTS!
100% EFFECTIVE!
100% WATER SOLUBLE!



# TAC TOTALLY ACTIVE CLARIFIER DRY BACTERIAL CULTURES

The Differences Between ML/PL and ML/TAC

While MICROBE-LIFT/PL has become the #1 pond clarifier asked for by brand name, there have been, and always will be, people who prefer products in a dry powder form. Because there are opportunities to formulate certain dry components into a dry product that would not be practical to mix into a liquid, Ecological Laboratories has developed MICROBE-LIFT/TAC.

Since Ecological Laboratories is the producer of the most popular biological pond clarifier on the market, there will inevitably be questions about the differences between the two products and why one would be selected over the other. Here is a list of the basic differences with the features and benefits of each:

- 1. MICROBE-LIFT/TAC does not have photosynthetic bacteria, which is one of the keys to the performance of MICROBE-LIFT/PL and what sets it above all other biological products for ponds. Unfortunately, no one has been successful to this point at preserving photosynthetic cultures in dry form. These photosynthetic bacteria are a valuable source of ML/PL's ability to clarify water and are capable of tapping into a potent source of energy to do this the sun. Many of these photosynthetic bacteria are also potent detoxifiers of water.
- 2. The organisms in ML/TAC are not grown together in the same container, as ML/PL is. As a result, you don't get the same "ecosystem in a bottle" that you get with ML/PL, and as a result, not quite the same ability to ecologically balance your pond.
- 3. The ML/TAC has powdered activated carbon which is well-known for its abilities to clarify water by providing a point surface for bacteria to grow on. It then acts as a weighting agent to help these bacteria settle to the bottom, thus removing turbidity associated with dispersed bacteria. The carbon also acts as a detoxifier by absorbing micro amounts of toxic materials: i.e. pesticides that can make their way into a pond.
- 4. ML/TAC also has sodium bicarbonate a buffer that can help stabilize the pH.
- 5. ML/TAC has sea salt that helps to induce a protective slime layer on fish.
- 6. ML/TAC dry formulation has no odor.

SIZE	ITEM#	TREATS	APPLICATION RATE		
8 OZ.	MLXTAC8	XTAC8 80-250 GAL POND - 28 WKS. First 4 Weeks (Weekly)		Maintenance (Twice Monthly)	
1 LB.	MLXTAC16	500 GAL POND - 16 WKS.	1 oz. (2 Tbs.) for every	1 oz. (2 Tbs.) for	
3 LBS.	MLXTAC3	250 gallans of pand water		every 250 gallons of pond water	
5 LBS.	MLXTAC5	2,000 GAL POND - 20 WKS.	Dilute dosage in a 1/2 gal. of lukewarm water. Apply directly over surface area of pond or spread around perimeter.		
25 LBS.	MLXTAC25	EXTRA LARGE PONDS AND WATER FEATURES			

### MC MAXIMUM CLARITY +

100% natural blend of bacteria, enzymes, and buffering agents.

Includes four additional natural ingredients that tie-up excess inorganic compounds, buffer the pH, and help balance the pond ecosystem.

SIZE	ITEM #	TREATS APPLICAT		TION RATE	
6 OZ.	MLMCX6			Maintenance (Twice Monthly)	
12 OZ.	MLMCX12	MED PONDS: 250-750 GALS 12 WKS.	1 oz. (2 Tbs.) for	1 oz. (2 Tbs.) for	
3 LBS.	MLMCX3	LG PONDS: 750-2,000 GALS 32 WKS.	every 250 gallons of pond water	every 250 gallons of pond water	
5 LBS.	MLMCX5	X-LG PONDS: 2,000-5,000 GALS 20 WKS.	Application may be determined by pond water clarity		

## MICROBE-LIFT® Water Clarifiers (Dry)



### **SB SLUDGE-AWAY BOOSTER**

Specially Formulated to Remove Excess Nutrients From Ponds, Waterfalls and Streams

MICROBE-LIFT/SB adjusts the micronutrients in the pond water resulting in conditions that are beneficial for water quality and clarity, and help to eliminate debris.

#### **Directions**

Fill a bucket with warm water. Using the application rates below, stir until the ML/SB is dissolved. Spread around the perimeter of the pond. The pond water may become cloudy immediately after adding the liquid slurry. This is normal and should clear up within 24-48 hours. Ponds should be treated 2 to 3 times during the first month or once every 10-14 days. For treatment, ML/SB should be added to the pond once every month thereafter. NOTE: Do NOT pour directly into the pond!

SIZE	ITEM #	TREATS	APPLICA	ATION RATE
5 OZ.	MLSB5	SMALL PONDS: 80-250 GALS 18 WKS.	First 4 Weeks (Weekly)	Maintenance (Twice Monthly)
11 OZ.	MLSB11	MED PONDS: 250-750 GALS 11 WKS.	1 oz. (2 Tbs.) for every 250	1 oz. (2 Tbs.) for every 250
2.75 LBS.	MLSB2.75	LG PONDS: 750-2,000 GALS 29 WKS.	gallons of pond water	gallons of pond water
3.5 LBS.	MLSB3.50	X-LG PONDS: 2,000-5,000 GALS 36 WKS.	• •	ay be determined vater clarity

### CMC CALCIUM MONTMORILLONITE CLAY

It is said the secret to healthy, colorful Japanese koi is the clay mud in which they are raised. MICROBE-LIFT/CMC comes from one of the highest calcium clay deposits in the world. Calcium-based clay may help your pond water to produce some of the healthiest and deeply colored koi you've ever raised (or seen!) The koi's markings will become brighter and more

Plastic pre-formed ponds, as well as vinyl, cement and rubber ponds, do not have any nutrients on their bottom. In the wild, carp use mud to get many of their micro-nutrients and minerals. MICROBE-LIFT/CMC has a negative electric charge which will bind the clay particles to positively charged toxins in the water. MICROBE-LIFT/CMC is not only a nutrient source for koi, it will also "polish" your pond water. The clay acts as a natural flocculent and the particles that are bound up are filtered

SIZE ITEM# APPLICATION RATE **TREATS** Pond Volume Maintenance 2 LBS. MLKKB2 200 GAL POND - 2 YRS. 1 level tsp. 100-249 gals. twice weekly 1 level Tbs. 4 LBS. MLKKB4 500 GAL POND - 16 MOS. 250-500 gals. twice weekly 501-1,000 2 level Tbs. 6 LBS. MLKKB6 1,000 GAL POND - 1 YR. twice weekly gals. You may use more clay to EXTRA LARGE PONDS OR 25 LBS. MLKKB25 meet your goals. Cannot be PONDS WITH MANY FISH overdosed.

### **CLAY IS USED IN PONDS TO ACHIEVE MANY GOALS:**

- Provides fish nutrition through mineral ingestion
- Improves fish color
- Detoxifies and clarifies pond water (polishing)

100% Natural Formulation for Pond Clarity, **Koi Health, Growth & Color** 



out of the pond. The clay can help make pond

water sparkling clean (polishing).



### **THERAP**

- Biologically supports the fish's immune system
- Improves fish health, growth and longevity
- Reduces environmental stress
- For use with all ornamental, cold water, temperate, cyprinids, native and wild species
- Safe for all animals in and around the pond

	SIZE	ITEM #	TREATS	APPLICATION RATE				
				Pond Vol. (Gals.)	Week 1	Weeks 2, 3, 4	Maintenance 1 x per month	
	32 OZ.	THERAPQ	500 GAL POND - 11 MOS.	80-250	8 oz.	2 oz.	2 oz.	
Н				251-500	10 oz.	3 oz.	3 oz.	
				501-1,000	14 oz.	5 oz.	5 oz.	
				1,001-1,500	18 oz.	6 oz.	6 oz.	
				1,501 - 2,500	24 oz.	8 oz.	8 oz.	
	CALLON	THERAPG4	5 000 DOND 21 MOS	2,501 - 3,500	28 oz.	10 oz.	10 oz.	
	GALLON	INEKAPG4	5,000 POND - 21 MOS.	3,501 - 5,000	32 oz.	12 oz.	12 oz.	
				5,001 - 7,500	40 oz.	16 oz.	16 oz.	
				7,501 - 10,000	48 oz.	20 oz.	20 oz.	



### **ROMET TC**

Romet® TC will help you provide the benefits of a medicated food by rolling your favorite fish food in this anti-bacterial top coating.

Romet® TC is a combination of sulfadinmethoxine and ormetoprin and may be top coated on any feed.

SIZE	ITEM #	TREATS	APPLICATION RATE
2 OZ.	ROMETSM	UP TO 10 LBS. OF FISH FOOD	In order to coat 2.5 lbs. (40 oz.) of food, add 1/2 - 1 oz. (2 Tbsp.) of Romet® TC to a container with 2 oz. (1/4 cup) of water to create a slurry for coating the food of your choice.  Romet® TC should be fed at a rate equivalent to 50 milligrams of active ingredients per
4 OZ.	ROMETLG	UP TO 20 LBS. OF FISH FOOD	kilogram (23 mg/lb.) of live body weight of fish per day. As an example, for actively feeding fish, feed at the lower concentration (1/2 oz. per 2.5 lbs.) for five (5) days. For less active fish, feed at the higher concentration (1 oz. per 2.5 lbs: exactly 2 Tbsp.) for five (5) days.



### STRESS RELIEF

- Removes chlorine and chloramines
- Adds a multi-part skin slime-coat replacer
- Detoxifies heavy metals
- Adds essential electrolytes



SIZE	ITEM #	TREATS	APPLICATION RATE
16 OZ.	SRP16	960 GALS.	To condition water for (1) new ponds, (2) before, after or during water additions, or (3) before adding new fish,
32 OZ.	SRP32	1,920 GALS.	amphibians, invertebrates or plants, add 1 teaspoonful (5 mL.) of MICROBE-LIFT/Stress Relief per 10 gallons (38 L) of water. Add to transport bags at the same dosage. For
GALLON	SRPG1	7,680- GALS.	larger applications use the following measurements: 1 fl. oz. (30 mL.)/60 gal. (227 L). Shake well before using. Non-toxic to humans, pets and aquatic life.

MICROBE-LIFT/LICE & ANCHOR WORM

# TREATMENT FOR LICE & ANCHOR WORMS IN POND FISH

MICROBE-LIFT/Lice & Anchor Worm is the most effective treatment for diseases of fish caused by lice and anchor worms. When used as directed, MICROBE-LIFT/Lice & Anchor Worm will not harm biological filtration and may be used on scaleless fish.

**MICROBE-LIFT/Lice & Anchor Worm** may be used in any water temperatures above 40° F (4° C).

SIZE	ITEM #	TREATS:
16 OZ. (473 mL)	LAWP16	4,800 GAL. (18,170 L.)
32 OZ. (946 mL)	LAWP32	9,600 GAL. (36,340 L.)
1 GAL. (3.785 L)	LAWPG1	38,400 GAL. (145,360 L.)



16 OZ. (473 mL)





### **PRAZIQUANTEL**

The most effective treatment for flukes and tapeworms. Recommended as an annual spring treatment for ornamental ponds.

SIZE	ITEM #	TREATS	APPLICATION RATE*
10 GR.	PRAZI10	UP TO 1,000 GALS.	As a bath: Start the bath treatment with as large a partial water change as possible in the pond to be treated, or start with new water that has been conditioned with MICROBE-LIFT/XTreme. Do not stop filtration but remove activated carbon and stop foam-fractionation ("protein skimming"). Add enough MICROBE-LIFT/Praziquantel to produce a dosage of 2.5 mg/L (9.4625 mg/gal; 946.25 mg/100 gals.); vigorously shake the dosage with at least 1 quart of water for 3-5 minutes to produce a slurry. Pour the slurry into a 5 gallon bucket of water and mix well. Then distribute the mixture around the edge of the pond or pour into the pond filter or skimmer to achieve maximum distribution in the water. A single treatment of 7 days is usually sufficient. Do not use with any other drugs or treatments. In feed: To each 100 grams (3.5 oz) of dry feed (flake, granular or pellet) thoroughly mix in 400 mg of MICROBE-LIFT/
50 GR.	PRAZI50	UP TO 5,000 GALS.	Praziquantel. Moisten the dry mixture with 25 to 50 mL of grain alcohol (190 proof ethanol) for each 100 grams of dry feed; gently blend the moistened mixture to incorporate the Praziquantel into the feed. CAUTION: grain alcohol is flammable! Allow the mixture to air dry (do not heat), break up any clumps, package and store in a cool, dry place. Feed the medicated feed daily for 5 to 7 days.  For accuracy and reproducibility, carefully weight dosages. However, one tablespoon is approximately 2.9 grams (=2,907.6 mg) and will treat 300 gallons (=1,135 L).  Cautions: Keep out of reach of children. For ornamental pond fish use only; not for human or veterinary medical use.  * For every gram of Praziquantel, first add 5 mL. of water. Mix thoroughly. Then add 10 mL. of grain alcohol to completely dissolve before adding to pond.



#### **DEFEND**

Provides Rapid Relief for Whitish Cottony Patches on Skin or Fins & Grayish Slime Surface on Body

- Combines 2 major anti-fungal ingredients plus a slime coat stimulator
- Contains a healant to assist a natural slime-coat to mend and protect damaged tissues
- Intended for use with all ornamental pond fish and not for use with invertebrates Formerly labeled as Anti-Fungal Treatment

SIZE	ITEM #	TREATS	APPLICATION RATE
16 OZ.	DEFP16	UP TO 960 GALS.	Dose at the rate of one fluid ounce per 60 gallons (227 L.). Prior to the initial use of MICROBE- LIFT/DEFEND a partial water change of 25% or more should
32 OZ.	DEFP32	UP TO 1,920 GALS.	be made. Carbon filtration must be removed during treatment. (CAUTION: Do not stop other filtration.) Dosage may be repeated, following the recommended
GALLON	DEFPG1	UP TO 7,680 GALS.	water change, at least every 24 hours. MICROBE-LIFT/ Defend is best used in a separate quarantine/ treatment (Q/T) tank. If after 3 treatments, signs of the disease being treated persist, perform a large water change (up to 50%), replace the carbon filtration and consider using an alternative treatment.



### **PROTECTANT**

A mild treatment to help protect against parasites, harmful bacteria, and environmental stresses

- Reduces the possibility of infection and/or re-infection
- Contains double slime-coat protection

SIZE	ITEM #	TREATS	APPLICATION RATE
16 OZ.	PROP16	UP TO 960 GALS.	To aid fish, amphibians and aquatic invertebrates contend with adverse environmental conditions and to aid in the protection from external
32 OZ.	PROP32	UP TO 1,920 GALS.	injuries in ponds, add 1 fl. oz. per 60 gal. (227 L.). MICROBE-LIFT/ Protectant should be used, following appropriate water changes, at the
GALLON	PROPG1	UP TO 7,680 GALS.	successful conclusion of treatments for external diseases. Dosage may be increased up to 10 times without adverse effects. MICROBE-LIFT/ Protectant does not interfere with fish's gills or breathing, or with the use of water quality test kits.

### **ICH-OUT**

Provides Rapid Relief of Ich & Parasitic Diseases for All Pond Fish

- Combines 3 of the most preferred anti-parasitic ingredients as well as a topical treatment for an effective treatment for Ich (white spots), Trichodina, (flicking, flashing excess mucus production) and Chilodonella
- Safely helps to reduce the chances of secondary infections and will not burn
- Intended for use with all ornamental pond fish and not for use with invertebrates

Formerly labeled as Parasite Treatment



SIZE	ITEM #	TREATS
16 OZ.	ICHP16	1,920 GALS.
32 OZ.	ICHP32	3,840 GALS.
GALLON	ICHPG1	15,360 GALS.

Dose at the rate of one teaspoon (5 mL.) for each 20 gallons (76 L.) of water, or one fluid ounce per 120 gallons (454 L.). Prior to the initial use of MICROBE-LIFT/Ich-Out a partial water change of 20% or more should be made; this water change should be coordinated with the period when the diseased fish are showing the least number of cysts (spots). Carbon filtration must be removed during treatment. (CAUTION: Do not stop other filtration.) Treatments may be repeated, following the recommended water change, at least every 24 hours. As with the initial dosage of MICROBE-LIFT/Ich-Out the best results can be expected if the water change and dosage are performed when the diseased fish are showing the fewest cysts (spots). Treatment in a separate quarantine (Q/T) tank is strongly recommended.



### **BSDT BROAD SPECTRUM DISEASE TREATMENT**

This is the preeminent product in this field because it is formulated with Malachite Green Chloride instead of the more toxic oxalate salt. It is the most effective treatment for the control of diseases caused by Ichthyophthirius (Ich), Costia, Trichodina, Chilodonella, Oodinium, and fungal infections.

Do not freeze.

Do not use with salt.

SIZE	ITEM #	TREATS	APPLICATION RATE
16 OZ.	BSDT16	UP TO 4,800 GALS.	Add 3.5 fl. oz. (100 mL) of MICROBE-LIFT/BSDT for every 1,000 gallons of water to be treated. As with all disease treatments an initial
32 OZ.	BSDT32	UP TO 9,600 GALS.	partial water change of at least 20% must be made; a nearly total water change (>90%) will greatly improve the effectiveness. Remove all carbon filtration just before adding MICROBE-LIFT/BSDT, and replace
GALLON	BSDTG1	UP TO 38,400 GALS.	the carbon at the conclusion of the treatment. Treatment may be repeated daily following at least a 20% water change. The treatment may be repeated every 8 to 12 hours depending upon the response of the fish to the treatment. Do NOT bypass your bio-filters, allowing a more comprehensive treatment of the entire pond system.

### **RESTORE**

Promotes Regeneration from Damages to Skin, Fins and Scales

- Combines healing and protective coating action with fast results, especially when treating shredded fins, cuts, scratches and/or abrasions from rock and gravel
- Provides protection against secondary bacterial infection
- Contains double slime-coat protection promoting natural defense against infection plus added electrolytes and Vitamin B-12 to help heal and regenerate fins
- Can be combined with MICROBE-LIFT treatments for parasites or fungus to help repair damaged tissues

SIZE	ITEM #	TREATS	APPLICATION RATE
16 OZ.	RESTP16	UP TO 960 GALS.	To condition water, add 1 fl. oz. (30 mL.) per 60 gallons
32 OZ.	RESTP32	UP TO 1,920 GALS.	(227 L.). Dosage may be increased without adverse effects.
GALLON	RESTPG1	UP TO 7,680 GALS.	MICROBE-LIFT/Restore does not interfere with fish's gills or breathing, or with the use of water quality test kits.



ESPECIALLY HELPFUL FOR BUTTERFLY KOI AND FANCY-TAILED GOLDFISH!

# MICROBE-LIFT® Pond Salt



### **POND SALT CRYSTALS**

Will help maintain a healthy pond environment and reduce the threat of parasitic disease in pond water.

### For Stress Reduction:

Use for quarantine tanks containing added electrolytes and Allantoin, which accelerates wound and fin healing.

Reduces the effects of nitrite toxicity

Adds electrolytes

SIZE	ITEM #	TREATS	APPLICATION RATE
2.5 LBS.	PSALTSM	100 GALS.	Small Ponds: 1/2 cup (120 g) per
5 LBS.	PSALTMD	200 GALS.	10 gals. (38 L) of pond water
9 LBS.	PSALTLG	360 GALS.	Large Ponds: 5 cups (1.13 kg) per
35 LBS.	PSALTXLG	1,400 GALS.	100 gals. (378 L) of pond water
50 LBS.	PSALTXXLG	2,000 GALS.	



# **NEW!**

from the makers of MICROBE-LIFT®

# Lawn and Garden Products

including

- Microbes & Humates for Hydroponic Systems
- Consumer Sprayers for Plants, Shrubs & Lawns
- Professional Products for Landscapers
   Nurseries

Visit www.MicrobeLife.com

# **NEW Formula**

**Herbal Water Conditioners** 

All-Natural Expellants for a Natural Aquatic Énvironment!

Antibiotic treatments pose many problems for water quality as well as kill nitrifying bacteria in the biofilter so that daily water changes become necessary in order to prevent ammonia poisoning.

### **Question:**

If MICROBE-LIFT®/PARAZORYNE™ and MICROBE-LIFT®/SABBACTISUN™ do not kill off the nitrifying bacteria in the filter, how are they still effective against pathogenic bacteria?

### **Answer:**

MICROBE-LIFT®/PARAZORYNE™ and MICROBE- LIFT®/SABBACTISUN™ are NOT BIOCIDES! They are natural immune system stimulants. Being such, when either product is used, no bacterial populations are affected in the water or filtration system.

MICROBE-LIFT®/PARAZORYNE™ and MICROBE-LIFT®/SABBACTISUN™ do not degrade water quality - saving you both time and money. During treatment with these products, your fish can be fed normally and filtration can remain in normal operation, all aiding the well-being and recovery of your fish. Although using a quarantine tank will always be safer and more economical, MICROBE-LIFT®/PARAZORYNE™ and MICROBE-LIFT®/SABBACTISUN™ can be safely used in show tanks and ponds.



# **SABBACTISUN**<sup>™</sup>

Effective against these

### **Bacterial Diseases**

- · Bacterial dropsy · Fungus · Milky skin
- Fin/tail rot Bulging eyes Ulcers
- Mouth rot Raised scales

MICROBE-LIFT®/SABBACTISUN™ is a unique, herbal, immune-enhancing stimulant which reduces bacteria and fungal infections in fish showing symptoms such as: fin and tail rot, ulcers, bulging eyes (Exophthalmia), milky skin, raised scales, mouth rot, fungus and dropsy (ascites). MICROBE-LIFT®/SABBACTISUN™ will help boost the natural immune system of the fish with no risk of building up future resistance, as can occur when antibiotics are used.

MICROBE-LIFT®/SABBACTISUN™ will help to drive pathogenic bacteria off the fish and, without a host, ultimately results in the death of the bacteria. MICROBE-LIFT®/SABBACTISUN™ is effective at reducing bacterial infections as well as ulcers and wounds, which often occur on Koi. Regular antibiotics may kill non-resistant bacteria, but will not heal ulcers and will leave an open wound or ulcer sensitive to reinfection. Even with deep ulcers - and in a surprising short time span - MICROBE-LIFT®/SABBACTISUN™ additionally stimulates and accelerates regeneration of damaged tissue until no trace of the wound remains. So even if an antibiotic treatment is used, you should also use MICROBE-LIFT®/SABBAC-TISUN™ to minimize infection.

MICROBE- LIFT®/SABBACTISUN™ can be used directly in any pond and is safe for all life in and around it. It is also a great aide to use when acclimating fish to a new environment.

### Ready To Use Concentrate

### MICROBE-LIFT®/SABBACTISUN™

#SCON08 - 8 oz. (236 mL.) treats 590 gal. for 10 days #SCON16 - 16 oz. (473 mL.) treats 1,183 gal. for 10 days #SCON32 - 32 oz. (946 mL.) treats 2,365 gal. for 10 days #SCONG1 - 1 gal. (3.785 L.) treats 9,462 gal. for 10 days Now **Affordable All Ponds** with Fish!

16 07.

1 Gal.

32 07

# **Ready-to-Use Concentrate**

# **PARAZORYNE**<sup>™</sup>

Effective against these

# **Parasitic Diseases**

- White spot Costia Flukes (gill & skin)
- Trichodina Oodinium Chilodonella

MICROBE-LIFT®/PARAZORYNE™ is a unique, herbal immune-enhancing stimulant which reduces skin flukes (Gyrodactylus), gill flukes (Dactylogyrus), Ich (Ichthyophthirius multifillis), Oodinium, Costia ((Ichthyobodo necator), Chilodonella and Trichodina. Parasitic infections are characterized by symptoms such as: milky skin, flashing and heavy breathing. However, they can only be diagnosed with certainty through microscopic examination.

Naturally controlled by the fish's immune system, parasites are present on most fish in very low levels at all times. When stress levels increase, the ability of the immune system to respond to its requirement to control the natural level of parasites is directly affected. This poor response allows parasites to increase in number, thus causing any of the serious, above-mentioned health issues in the host fish. MICROBE-LIFT®/PARAZORYNE™ supports the fish's immune system, driving off the excess parasites. Since they cannot return to the fish during that treatment, the majority of parasites will starve without a host. So although MICROBE-LIFT®/PARAZORYNE™ does not directly kill parasites, it is ultimately responsible for their death.

MICROBE-LIFT®/PARAZORYNE™ restores the fish's natural balance. It is not a disinfectant. It is harmless to all nitrifying filter bacteria and aquatic plants. Using chemicals can have a *detrimental effect* on the bacterial biomass of the tank/pond ecosystem. Even after a treatment, there will be some parasites present, as there will be on any healthy fish.

Use during stress, change of seasons and at the first sign of disease! Prices
Reduced
50%

### Ready To Use Concentrate

MICROBE-LIFT®/PARAZORYNE™

#PCON08 - 8 oz. (236 mL.) treats 590 gal. for 10 days #PCON16 - 16 oz. (473 mL.) treats 1,183 gal. for 10 days #PCON32 - 32oz. (946 mL.) treats 2,365 gal. for 10 days #PCONG1 - 1 gal. (3.785 L.) treats 9,462 gal. for 10 days MICROBE-LIFT®/SABBACTISUN™ and MICROBE-LIFT®/PARAZORYNE™ have so many benefits, why would anyone use antibiotics, antiparasitics or chemotherapeutics?

Antibiotics, Antiparasitics & Chemotherapeutics:

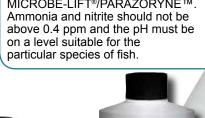
- Can kill the nitrifying (biofilter) bacteria which results in water quality problems
- · May result in the development of resistant bacteria
- · Can lower the activity of the fish's immune system
- May have negative impact on sensitive fish species and plants
- · Can affect silicone sealing

# Benefits of MICROBE-LIFT®/SABBACTISUN™ and MICROBE-LIFT®/PARAZORYNE™

- 100% natural, herbal products
- MICROBE-LIFT®/SABBACTISUN™ is effective against pathogenic bacteria such as Aeromonas sp., Pseudomonas sp., Cytophaga/ Flavobacterium/ Flexibacter sp. and also many antibiotic-resistant bacteria strains
- MICROBE-LIFT®/PARAZORYNE™ is effective against parasites such as Gyrodactylus sp., Dactylogyrus sp., Chilodonella sp., Trichodina sp., Ichthyophthirius multifillis, Ichthyobodo necator and Oodinium sp.
- Safe for all fresh and brackish water fish species and aquatic plants
- · Does not result in resistance
- Non-toxic
- Does not affect nitrifying bacteria (biofilter bacteria)
- · Does not color the water or stain or affect silicon sealing
- No harmful residues. MICROBE-LIFT®/SABBACTISUN™ and PARAZORYNE™ are completely biodegradable
- · Environmentally friendly
- · More effective than home remedies

In most cases, fish diseases are caused by bad living conditions such as: overcrowding, poor water quality or an improper biotype. To prevent recurrence, examine the underlying cause of the problem. Quarantine new fish for at least four weeks. A single dose of MICROBE-LIFT®/SABBACTISUN™ will help the fish quickly acclimate to its new environment.

When the water is poor, the immune system of the fish cannot be enhanced by MICROBE-LIFT®/SABBACTISUN™ or MICROBE-LIFT®/PARAZORYNE™.





16 oz.

32 oz.

1 Gal.

# MICROBE-LIFT® Mosquito Control

### **BMC BIOLOGICAL MOSQUITO CONTROL**

- Biological Larvicide
- Use to prevent mosquitoes from breeding in birdbath or statuary
- Can be used in water gardens that contain live fish and plants
- 540 square foot coverage per teaspoon
- Up to 14 days activity depending on application site
- Disperses evenly in water
- No toxicity to fish, non-target invertebrates
- No adverse aesthetics to the pond
- Can be applied to areas used by or in contact with humans, animals, horses, livestock, pets, birds or wildlife
- EPA Registered

BMC1G4 is not for sale, distribution or use in New York state.



SIZE	ITEM #	TREATS	
1 0Z	BMC1	250 GALS 10 MOS.	Use 6 dro
2 OZ	BMC2	400 GALS 2 YRS.	Use the d
6 OZ.	BMC6	2,000 GALS 16 MOS.	Use 2.5 r
12 OZ.	BMC12	2,500 GALS 2 YRS.	per 2,000 Treat wee
16 OZ.	BMC16	5,000 GALS 17 MOS.	nout woo
1 GAL	BMC1G4	SEE LABEL	

Use 6 drops per 100 gals. of water.
Use the dosage cup provided. Add directly to water to be treated.

Use 2.5 mL. per 1,000 gals. of water (5 mL. per 2,000 gals. of water) every other week. Treat weekly if necessary.





### **COMBO PACK**

ITEM #	CONTAINS	INCLUDES
BMCPSAM	3 PCS. BMC2 3 PCS. BMC6 3 PCS. BMC12 3 PCS. BMC16	FREE TABLETOP DISPLAY

# **MICROBE-LIFT®** For Aquatic Plants



### MICROBE-LIFT/BLOOM & GROW MICROBIAL ROOT DIP

Enhances metabolism • Increases chlorophyll • Increases nutrient availability

ML/RD is a natural humic and microbial based product that is specifically formulated to promote a healthy and stronger root system. May be used with all water plants, as well as bog and terrestrial plants.

- Contains photosynthetic microorganisms, humic and fulvic acids
- Reduces transplant shock
- Helps to prevent pathogens
- Aids in disease resistance





### MICROBE-LIFT/ BLOOM & GROW NOURISH

MICROBE-LIFT/Nourish (ML/Nourish) contains combinations of naturally occurring microorganisms that share key traits for plant enhancement.

- Enhances nutrient availability
- Enhances substrate
- Contributes to enhanced microbial activity and the overall biochemical processes

SIZE	ITEM #	TREATS:
16 OZ. (473 mL)	NOUR16	4,800 GAL.
32 OZ. (946 mL)	NOUR32	9,600 GAL.
1 GAL. (3.785 L)	NOURG1	38,400 GAL.



# **MICROBE-LIFT®** For Aquatic Plants

### **ENSURE**

Encourages better root and blossom development and healthier overall plant growth

- Ensures a healthy start for plants and reduces transplant shock
- Increases luster of leaves and pads and reduces browning of leaf edges
- Establishes and maintains symbiotic microbial populations
- Promotes greater plant vitality and stimulates root formation and growth
- Enhances ability of plants to utilize light, water and nutrients by making the nutrients more bioavailable
- Ensures natural water conditions
- Biologically supports a good pond balance resulting in a vigorous growth environment
- Compatible with all pond fish, wildlife and the other MICROBE-LIFT products
- Improves tolerance to temperature fluctuations

This bacterial product DOES NOT contain any nutrients!

SIZE	ITEM #	TREATS	APPLICATION RATE			
			Pond Volume (Gals)	1st App. (Purge)	Next 4 Weeks (Once per Wk.)	Maintenance
32 OZ.	ENSUREQ	500 GAL POND - 2	80-250	8 oz.	2 oz.	2 oz.
32 02.	LIVOUTLA	MOS.	251-500	10 oz.	3 oz.	3 oz.
			501-1,000	14 oz.	5 oz.	5 oz.
			1,001-1,500	18 oz.	6 oz.	6 oz.
			1,501-2,500	24 oz.	8 oz.	8 oz.
			2,501-3,500	28 oz.	10 oz.	10 oz.
GALLON	ENSUREG4		3,501-5,000	32 oz.	12 oz.	12 oz.
			5,001-7,500	40 oz.	16 oz.	16 oz.
			7,501-10,000	48 oz.	20 oz.	20 oz.

### **BLOOM & GROW**

Specially formulated for aquatic plants of all types to promote larger, brighter and faster blooms as well as healthier and stronger roots

- Highly concentrated formula
- Contains micro and macro nutrients
- Essential primary and secondary nutrients
  - Nitrate and phosphate free
  - This product is not a fertilizer

	SIZE	ITEM #	TREATS	APPLICATION RATE
	16 OZ.	BNG16	4,800 GAL.	Add one ounce per 300 gallons of pond water. For 16 oz size, 1 oz = 5 capfuls
I	32 OZ.	BNG32	9,600 GALS.	For 32 oz size, 1 oz = 4 capfuls
I	GALLON	BNGGAL	38,000 GALS.	For 1 gal size, 1 oz = 5 capfuls
	16 OZ.	BNG16F	4,800 GAL.	BILINGUAL FRENCH & ENGLISH PACKAGING





### **CAPM**

Concentrated Aquatic Planting Media with Beneficial Bacteria

Pre-colonized with heterotrophic beneficial bacteria 100% natural minerals
Will not float or cloud pond water
No fertilizer, compost, peat, or pesticides

	SIZE	ITEM #	TREATS	APPLICATION RATE
ĺ	10 LBS.	MLCAPM10	SEE	LICE AC NEEDED
I	20 LBS.	MLCAPM20	LABEL	USE AS NEEDED



### **AQUA XTREME**

- A full function, buffered water conditioner
- Detoxifies nitrite, copper and heavy metals, removes and detoxifies chlorine and ammonia, destroys chloramines, boosts alkalinity
- Adds electrolytes and a slime-coat replacer to reduce stress
- For use in ponds where chloramines are added to the water supply

SIZE	ITEM #	TREATS	APPLICATION RATE
16 OZ.	XTP16	960 GALS.	Shake well before using. Add one teaspoon (5 mL) of MICROBE-LIFT/
32 OZ.	XTP32	1,920 GALS.	Aqua Xtreme per 10 gallons of water: to fully condition tap water in new ponds; before, after or during water additions; or before adding new fish,
GALLON	XTPG1	7,680 GALS.	amphibians, invertebrates or plants. For larger applications, add 1 fl. oz. per 60 gallons of water.

### THE ULTIMATE POND PHOSPHATE REMOVER

MICROBE-LIFT/Pond Phosphate Remover is a polymeric blend with outstanding qualities, including the ability to tie-up large quantities of phosphate without negatively influencing the pond water in any way. Phosphate - caused by the decomposition of organic substances such as food surpluses, dead plant matter and excretion - is only harmless in concentrations below 0.1 ppm in fresh water.

Safely removes phosphate from pond water
 Will not harm fish or plants

SIZE	ITEM #	TREATS	APPLICATION RATE		
16 OZ.	PHOSRE16	UP TO 1,600 GALS.	Use one ounce (5 capfuls) of MICROBE-LIFT/Phosphate Remover per 100 gallons. Depending on water quality, organics and fish waste content, 1 ounce can remove		
32 OZ.	PHOSRE32	UP TO 3,200 GALS.	between 1.0 - 1.5 ppm phosphate.  If phosphate level is still high, repeat dose. In case of a very high phosphate level, several treatments may be		
GALLON	PHOSREGAL UP TO 12,800 GALS.		required to eradicate the excess phosphate problem.  Always add MICROBE-LIFT/Phosphate Remover to or near the recirculating pump.		





### **FLOCCULANT PLUS**

A proprietary formulation used to coagulate suspended solids in the pond water. After use, particles in the water settle to the bottom of the pond and/or filter out through the filter system.

- Clears cloudy water
- Safe for aquatic life and plants
- Attracts and precipitates suspended particles
- Improves filtration

	SIZE	ITEM #	TREATS	APPLICATION RATE
	16 OZ.	FPLUS16	UP TO 2,400 GALS.	Add one ounce (5 capfuls) per 150 gallons of CLOUDY pond
i	32 OZ.	FPLUS32	UP TO 4,800 GALS.	water. Maintain aeration and filtration for maximum clarifica- tion. After the milky haze period, conditions should clear
Ī	GALLON	FPLUSGAL	UP TO 19,000 GALS.	within 12-24 hours. Dosage may be repeated as necessary.
	16 OZ.	FPLUS16F	UP TO 2,400 GALS.	BILINGUAL FRENCH & ENGLISH PACKAGING



### **AMMONIA REMOVER**

Gives beneficial bacteria time to multiply and recover if the biological filter gets damaged, keeping pond fish from being stressed

- Every ounce removes 1.25 ppm of toxic ammonia per 150 gallons of pond water by forming an irreversible complex to reduce free ammonia to safe levels
- May be used at startup, when making water changes, replacing lost water due to evaporation or when your pond is overstocked with too many fish
- Neutralizes residual chlorine and destroys deadly chloramine
- Treats ammonia burn in pond fish
- •Safe for use with all pond fish and aquatic life

SIZE	ITEM #	TREATS	APPLICATION RATE
16 OZ.	AMRE16	UP TO 1,440 GALS.	To remove and detoxify ammonia, chlorine and chloramines for water in ponds, add 1 teaspoonful of MICROBE-LIFT/Ammonia Remover per 15 gallons (57 L.) or 1 fl. oz. per 90 gallons of water. To remove ammonia in existing ponds add 1 teaspoonful/15 gallons of MICROBE-
32 OZ.	AMRE32	UP TO 2,880 GALS.	LIFT/Ammonia Remover for each 1.0 mg/L., or fraction thereof, of measured total ammonia (=0.85 mg/L. total ammonia-nitrogen). To control ammonia when shipping fish or invertebrates use MICROBE-LIFT/Ammonia Remover at the standard dosage rate or increase (up
GALLON	AMREGAL	UP TO 11,520 GALS.	to 10 times) if total ammonia levels are expected to be higher than 1.0 mg/L. It is recommended for routine shipping of fishes and invertebrates that trial static shipping tests be performed to determine the typical levels of total ammonia that will occur in untreated water.



1 lb. (0.45 KG)

#### **DRY AMMONIA REMOVER**

MICROBE-LIFT/Dry Ammonia Remover uses a PATENTED process that removes chlorine, DESTROYS chloramines and completely ELIMINATES the ammonia that is left behind when the chloramine bond is broken.

- Ship live animals without toxic ammonia problems for 72+ hours
- Can be combined with antibiotics and anesthetics
- Completely safe for biofilters
- Tested with shrimp, shellfish, aquatic invertebrates

SIZE	ITEM #	TREATS	APPLICATION RATE
1 LB. (.45 KG)	DAR01	3,760 GAL. (14,233 L)	For each measured or antici-
5 LBS. (2.26 KG.)	DAR05	18,800 GAL. (71,165 L)	pated 1 mg/L total ammonia, 1 oz. of ClorAm-X will treat 235 gals. of water. It will remove 1
10 LBS. (4.5 KG.)	DAR10	37,600 GAL. (142,331 L)	ppm total ammonia, 3.2 ppm chloramines and 2.0 ppm chlorine
55 LBS. (25 KG.)	DAR55		CHIOTHE
	1 LB. (.45 KG) 5 LBS. (2.26 KG.) 10 LBS. (4.5 KG.)	1 LB. (.45 KG) DAR01 5 LBS. (2.26 KG.) DAR05 10 LBS. (4.5 KG.) DAR10	1 LB. (.45 KG)       DAR01       3,760 GAL. (14,233 L)         5 LBS. (2.26 KG.)       DAR05       18,800 GAL. (71,165 L)         10 LBS. (4.5 KG.)       DAR10       37,600 GAL. (142,331 L)



### **PH INCREASE PLUS**

Safely raises pH Levels

- Formulated in deionized water
- Includes 2 pH increasers for gentle effectiveness and 3 electrolytes to help maintain osmotic balance
- Contains a slime-coat ingredient for skin protection and stress reduction in pond fish
- Has a chelating agent to enhance water quality
- Not harmful to fish or plants

SIZE	ITEM #	TREATS	APPLICATION RATE
16 OZ.	PHIN16		Test pond water the same time each day (dawn=lowest pH; dusk=highest pH) for a pH reading above 8.5. Most ponds target a 7.5 pH with an alkalinity level between 100-200 ppm (normal range). Add one ounce per 375 gallons of pond water for every 1.0 pH unit change
32 OZ.	PHIN32	Use as directed	desired.  Apply in several steps and measure change in pH before next addi-
GALLON	PHINGAL		tion. If your pond contains fish and/or plants, do not dramatically change your pH levels more than 0.5 pH unit in a 24 hour period, as not to shock aquatic life and/or fish.

### **PH DECREASE**

Safely lowers pH Levels

- Formulated in deionized water
- Includes 2 pH decreasers for gentle effectiveness and 3 electrolytes to help maintain osmotic balance
- Contains a slime-coat ingredient for skin protection and stress reduction in pond
- Has a chelating agent to enhance water quality
- Not harmful to fish or plants

SIZE	ITEM #	TREATS	APPLICATION RATE	
16 OZ.	PHDE16			
32 OZ.	PHDE32	Use as directed	Same as pH Increase	
GALLON	PHDEGAL	unootou		



### 7.5 BUFFER STABILIZER

Safely Buffers pH Levels & Prevents Wide pH Swings

- Includes 2 pH buffers for gentle effectiveness and 3 electrolytes to help maintain osmotic balance
- Provides necessary alkalinity for nitrification
- Not harmful to fish or plants



ı	SIZE	ITEM #	TREATS	APPLICATION RATE
	1 LB.	PHBUF1	OVER 800 GALS.	To LOWER the pH and hold it at 7.5: Add 4 level scoops (included) of this buffer per 120 gals. of
	4 LBS.	PHBUF4	OVER 3,300 GALS.	pond water.  To RAISE the pH and hold it at 7.5:  First adjust the pH with MICROBE-LIFT/pH Increase Plus.  Next, add four level scoops of this buffer per 120 gallons of
	6 LBS.	PHBUF6	OVER 4,900 GALS.	pond water. <b>Application Rates:</b> 6 lbs. will treat over 4,900 gallons/18,000 Liters.

### **KH - ALKALINITY BIO-ACTIVE BOOSTER**

The biological removal of ammonia (nitrification) is one of the most important functions in a pond. This essential microbial process requires the presence of carbonate alkalinity in pond water at all times, as the biological ammonia removal process utilizes 7.1 mgs. of carbonate alkalinity for every 1 mg. of ammonia removed by nitrification.

Should pond carbonate levels fall below the necessary level, nitrification will stop and will fail to start again. With the loss of carbonate alkalinity pH levels will vary and pH be difficult to control as carbonate alkalinity stabilizes pond pH.



SIZE	ITEM #	TREATS:
2 LBS. (0.9 KG.)	CABPSM	
8 LBS. (3.62 KG.)	CABPMD	CEELADEL
20 LBS. (9.07 KG.)	CABPLG	SEE LABEL
50 LBS. (22.67 KG.)	CABPXL	

8 lbs. (3.62 kg.)

2 LBS. (0.9 KG.)

### **DEFOAMER**

### Eliminates foam in seconds!

Gets rid of unsightly foam fast, leaving pond water clean and clear. Persistent foaming can indicate a heavy concentration of undissolved organics. Partial water changes can improve water quality which will help reduce foaming.

- Leaves pond and fountain water clean and clear
  - For ponds and fountains of all sizes
  - Safe for fish, plants, birds, and aquatic life

SIZE	ITEM #	TREATS	APPLICATION RATE
16 OZ.	DF0AM16	UP TO 8,000 GALS.	
32 OZ.	DF0AM32	UP TO 16,000 GALS.	Add one ounce (5 capfuls) per 500 gallons of pond water
GALLON	DFOAMGAL	UP TO 64.000 GALS.	ganonio oi pona water





### **DECHLORINATOR +**

- Highly concentrated for maximum dechlorination, detoxification, and water conditioning
- Instantly neutralizes chlorine, chloramines, chlorine dioxide, copper and other heavy metals without scavenging oxygen as other dechlorinators do
- Contains 2 slime-coat ingredients and electrolytes for stress

SIZE	ITEM #	TREATS	APPLICATION RATE
16 OZ.	DECHL16	UP TO 960 GALS.	To condition water for new ponds, before, after or during water additions, or before adding new fish, amphibians,
32 OZ.	DECHL32	UP TO 1,920 GALS.	invertebrates or plants, add 1 teaspoonful (5 mL.) of MICROBE-LIFT/Dechlorinator+ Water Conditioner per 10 gallons (38 L) of water. Add to transport bags at the same
GALLON	DECHLGAL	UP TO 7,680 GALS.	dosage. For larger applications use the following measurements: 1 fl. oz. (30 mL.)/60 gal. (225 L).

# SUPER START BEAD FILTER BACTERIA - FOR ALL BEAD & BIOLOGICAL FILTERS NATURAL - NONTOXIC - NONPATHOGENIC

Like most types of mechanical/biological filters, bead filters rely on the use of a media that provides a high surface area/volume ratio. This allows for support of the necessary amount of biomass, in the form of biofilm, to properly remove organic and inorganic waste from the water, making it suitable for fish and other normal aquatic life. Within the biofilm it is possible to carry out aerobic, facultative anaerobic and chemosynthetic processes if all the necessary bacterial species are present.

Consequently, for these filters to function, it is necessary to have proper numbers and distribution of species. MICROBE-LIFT/SUPER START contains aerobic heterotrophs, facultative anaerobes, anaerobic and chemotrophic bacteria capable of carrying out all the necessary processes for optimum performance of bead filters.

- Rapid establishment of organic removal capabilities
- Rapid establishment of nitrogen cycling including nitrification and denitrification
- · Reduces buildup of residue in the filter, decreasing maintenance and improving filter efficiency by avoiding "channeling."
- Rapid recovery of filter after use of medications and antibiotics
- Breakdown of residual medications, like tea tree oils and formalin products, which are inhibitory to most bacteria, after use
- · Effective over a wide pH range
- · Significantly reduces noxious odors caused by algae, fish, waste and urine
- · Reduces hydrogen sulfide, which creates strong, offensive odors

SIZE	ITEM #	TREATS	APPLICATION RATE	
	MLBFBQ	UP TO 500 GALS./ 10 TREATMENTS	Pond Volume (Gals.)	Dosage
32 OZ.		UP TO 1,000 GALS./ 8 TREATMENTS	80-200	2 oz.
			201-500	3 oz.
	MLBFBG4	UP TO 1,000 GALS./	501-1,000	4 oz.
			1,001-5,000	6 oz.
GALLON		32 TREATMENTS	When starting up the MICROBE-LIFT/Super After cleaning the filter	start for 4 weeks.



### PL/GEL FILTER PAD INOCULANT

MICROBE-LIFT/PL Gel is a technological breakthrough because it's *the first product* that puts the bacteria right where you want it and it *STAYS THERE!* PL/Gel will quickly attach to and populate any filter media including foam, strapping, floss, bioballs, ceramic media, etc. This will help to rapidly establish the necessary biological activity in your filter to stabilize your pond's environment quickly. It will also help restore this activity to your filter when you clean or change the media.

- Easily applies to filter pads and media without running or getting messy.
- Contains the same broad-spectrum of bacteria found in MICROBE-LIFT/PL.
- Contains naturally occurring biopolymers, helping organisms quickly attach to media allowing for 80% reduction in filter start-up time.
- Helps to stabilize pond environment quickly upon startup and to eliminate transient instability that can occur when filter media is cleaned or replaced.
- Allows for more frequent cleaning of filters without subsequent instability if a pond has a high solids loading where frequent cleaning is beneficial
- Reduces the frequency of cleaning by accelerating the breakdown of organic solids that can lead to high maintenance requirements
- Helps to establish denitrification in the filter which can lower nitrate levels in the pond



SIZE	ITEM #	TREATS	APPLICATION RATE		
8 OZ.	GEL8	UP TO 200 GALS./ 4 TREATMENTS	Pond Volume (Gals.)	Dosage	
			80-200	2 oz.	
	1 16 OZ   GEL 16   '		201-500	3 oz.	
16 OZ.		UP TO 1,000 GALS./ 5 TREATMENTS	501-1,000	4 oz.	
			1,001-5,000	6 oz.	
32 OZ.	GEL32	UP TO 5,000 GALS./ 5 TREATMENTS	Inoculate (spread) <b>PL/GEL</b> directly on the filter pad or media. The <b>PL/GEL</b> will absorb into the pad/media by letting it set 1-2 hours before turning the pump, filter and skimmer back on (provided water can maintain adequate oxygenation without circulation for this amount of time.) Repeat application of <b>PL/GEL</b> with each cleaning/replacement of filter pads/media, when nitrate levels exceed 0.6 mg/L or as necessary to maintain optimum performance from your filter or skimmer. Note: Please store in a cool location.		



### **SUPER ACTIVATED CARBON - BAG**

- Removes odors and colors
- Removes medications, organic pollutants
- Removes liquefied impurities
- Highest grade available\*
- Lasts twice as long as most carbons
- Treats twice as much as most carbons
- In pre-packed media bags
- PRE-COLONIZED WITH MICROBE-LIFT DRY HETEROTROPHIC BACTERIA

SIZE	ITEM #	TREATS	APPLICATION RATE
20 PCS. - 1 LB. PRE-PACKED NYLON BAGS	CAR1	UP TO 4,000 GALS. FOR 2-3 MONTHS	Small Ponds - Typically, 1 lb. per 200 gallons of pond water for 2-3 months Medium Ponds - 2-3 lbs. per 500 gallons of pond water for 2-3 months Large Ponds - Approximately 5 lbs. per 1000 gallons of pond water for 2-3 months depending on the load of debris or discoloration.



### **CERAMIC RINGS - BAG**

- Porous structure gives these rings many times more surface area than other media
- Optimum surface area supports large bacterial colonies
- Does not break down like other media
- In pre-packed media bags
- PRE-COLONIZED WITH MICROBE-LIFT DRY HETEROTROPHIC BACTERIA

SIZE	ITEM #	TREATS	APPLICATION RATE
20 PCS 2 LBS. PRE-PACKED NYLON BAGS	CRING2	SEE LABEL	The quantity to use is limited only by the design and capacity of your filter.



### **BULK MINI PADS**

- Allows for high water flow without clogging
- Fits into most filters and skimmers
- Traps suspended dirt and debris
- Put into Master Media Bags for direct placement in the pond
- May be replaced or cleaned and re-colonized

SIZE	ITEM #	TREATS	APPLICATION RATE	
500 PC. BOX	BSPAD500	SEE LABEL	The quantity to use is limited only by the design and capacity	
1,000 PC. BOX	BSPAD1000	OLL LABLE	of your filter.	



### **BULK PINBALLS**

- Ideal for nitrifying bacteria to colonize and thrive on
- 2 gallons (148 pre-colonized balls) has over 22,000 pins, 40 sq. ft. of surface area
- Fits most skimmers and filters

SIZE	ITEM #	TREATS	APPLICATION RATE	
125 PC. BOX	BBALL125			
250 PC. BOX	BBALL250	1 CUBIC	The quantity to use is limited	
500 PC. BOX	BBALL500	FT. = 600	only by the design and capacity	
1,000 PC. BOX	BBALL1000	PINBALLS	of your filter.	
2,000 PC. BOX	BBALL2000			



### **ZEOLITE-BAGS**

### (NO LIQUID BACTERIA)

- Removes ammonia
- Improves water quality
- Reduces fish stress
- Protects against ammonia spikes
- In pre-packed media bags
- PRE-COLONIZED WITH MICROBE-LIFT DRY HETEROTROPHIC BACTERIA

SIZE	ITEM #	APPLICATION RATE
20 PCS 2 LBS. PRE- PACKED NYLON BAGS	ZE02	Small Ponds - 2 lbs. per 200 gals. Medium Ponds - 4 lbs. per 500 gals. Large Ponds - 6 lbs. per 1,000 gals.

### **CARBON PELLETS & ZEOLITE-BAGS**

### (NO LIQUID BACTERIA)

- Removes ammonia
- Reduces fish stress
- Removes liquefied impurities
- Removes medications, organic pollutants
- Improves water quality
- Removes odors and colors
- Helps clear turbid water
- In pre-packed media bags
- PRE-COLONIZED WITH MICROBE-LIFT DRY HETEROTROPHIC BACTERIA



SIZE	ITEM #	APPLICATION RATE
20 PCS 2 LBS. PRE- PACKED NYLON BAGS	CARZ2	Small Ponds - Typically, 1 lb. per 200 gallons of pond water for 2-3 months  Medium Ponds - 2-3 lbs. per 500 gallons of pond water for 2-3 months  Large Ponds - Approximately 5 lbs. per 1,000 gallons of pond water for 2-3 months depending on the load of debris or discoloration.

### **MEDIA BAGS**

For use with Barley Pellets, Peat, Zeolite, Carbon, Bio-Balls, and all types of media.

SIZE	ITEM #
8" X 14"	MBAGSM
15" X 16"	MBAGMD
20" X 20"	MBAGLG
22" X 32"	MBAGXL





### PRE-COLONIZED MEDIA

by Mark J. Krupka, VP & Technical Director, Ecological Laboratories, Inc.

Buying media without bacteria is like buying a car without gasoline. The car may have the potential to transport you from place to place but you won't get very far without gas. In the same way, the media you put into a filter or a skimmer may have the potential to treat the water from your pond, but it cannot do anything until it becomes colonized with beneficial bacteria. Just as it makes more sense to buy a car with a full tank of gas, it also makes more sense to buy precolonized media so that you can derive the benefits from your filter or skimmer right away instead of waiting days to weeks for a biofilm to develop.

Of course, how beneficial pre-colonization is depends on the organisms with which the media is pre-colonized. Probably the most important bacteria to have on a pond filter media with fish are nitrifiers - the organisms that oxidize ammonia to nitrite and nitrate. This is because nitrifiers grow very slowly with growth rates 10 to 20 times slower than most heterotrophic (organic degrading) bacteria. Another reason colonizing with nitrifiers is beneficial is that ammonia buildup is one of the most significant problems that occur early on in the startup of a pond since ammonia can be toxic to fish at relatively low concentrations.

While heterotrophs (organic degrading bacteria) do grow faster, colonizing certain types of media - like activated carbon and carbon-zeolite combinations - can extend the useful life of the media. They do this by metabolizing organics and certain inorganic species that can be absorbed onto activated carbon and zeolites. Much like carbon, which is thermally regenerated using high temperatures to oxidize these absorbed materials, the bacteria can enzymatically oxidize these same compounds.

MICROBE-LIFT/BIOBALLS. **BIO-MINI** SPONGES, CERAMIC BIO-RINGS and ZEOLITE are pre-colonized media loaded with the Nitrosomonas, Nitrobacter and Nitrospira which make up the nitrifying bacteria in MICROBE-LIFT/NITE-OUT II. The MICROBE-LIFT pre-colonized media will provide for cycling of the nitrogen in your pond within hours, rather than days or even weeks. Using MICROBE-LIFT precolonized media will substantially reduce the potential for ammonia toxicity and allow for rapid stabilization of your pond. Get the "high octane" media for your filter or skimmer and watch them hum.

### All Pre-Colonized with Bacteria

### **BIOLOGICAL CERAMIC RINGS**



- Porous structure gives these rings many times more surface area than other media
- Optimum surface area supports large bacterial colonies
- Does not break down like other media
- In pre-packed media bags
- PRE-COLONIZED WITH MICROBE-LIFT LIQUID NITRIFYING BACTERIA

SIZE	ITEM #	TREATS	APPLICATION RATE
1.25 GAL. NITE-OUT II BACTERIA & 5 PCS./32 OZ. BAGS	PCRINGMBS	375 GALS./8-12 MOS. 750 GALS./4-6 MOS. 1,500 GALS./2-3 MOS.	After cleaning be sure to re-colonize the Biological Ceramic Rings by soaking in MICROBE-LIFT/Nite-Out II™, nitrifying bacteria for immediate nitrification. For best results change the
1.5 GAL. NITE-OUT II BACTERIA & 10 PCS./32 OZ. BAGS	PCRINGMBM	750 GALS./8-12 MOS. 1,500 GALS./4-6 MOS. 3,000 GALS./2-3 MOS.	bags every 4-6 months. Place at the final stage of filtration or place in "master" media bags directly into your pond. Use 1 bag for up to 150 gallons of pond water. Test your pond water weekly!

### **ZEOLITE**



- Removes ammonia
- Improves water quality
- Reduces fish stress
- Protects against ammonia spikes
- In pre-packed media bags
- PRE-COLONIZED WITH MICROBE-LIFT LIQUID NITRIFYING BACTERIA

SIZE	ITEM #	TREATS	APPLICATION RATE
1 GAL. NITE-OUT II BACTERIA & 5 PCS./32 OZ. BAGS	PZEOBAGS	375 GALS./8-12 MOS 750 GALS./4-6 MOS 1,500 GALS./2-3 MOS	The zeolite chips may be re- charged (recharge by cleaning monthly). After cleaning be sure to re-colonize the zeolite with MICROBE-LIFT Nite-Out
1.5 GAL. NITE-OUT II BACTERIA & 10 PCS./32 OZ. BAGS	PZEOBAGM	750 GALS./8-12 MOS 1,500 GALS./4-6 MOS 3,000 GALS./2-3 MOS	II™, nitrifying bacteria for im- mediate nitrification. For best results change the bags every 4-6 months. Use 1 bag for up to 150 gallons of pond water. Test your pond water weekly!

### **BIOLOGICAL PIN BALLS**



- Ideal for nitrifying bacteria to colonize and thrive on
- 2 gallons(148 pre-colonized balls) has over 22,000 pins, 40 sq. ft. of surface area
- Fits most skimmers and filters
- PRE-COLONIZED WITH MICROBE- LIFT LIQUID NITRIFYING BACTERIA

ı	SIZE	ITEM #	TREATS	APPLICATION RATE
ı	1.5 GAL. NITE-OUT II BACTERIA & 148 PCS. BIO BALLS	PBBALLS	SEE LABEL	The quantity to use is limited only by the
	2.5 GAL. NITE-OUT II BACTERIA & 296 PCS. BIO BALLS	PBBALLM	SEE LADEL	design and capacity of your filter.

### **ACTIVATED CARBON & ZEOLITE PELLETS**



- Removes ammonia
- Improves water quality
- Reduces fish stress
- Removes odors and colors
- Removes medications
- Removes organic pollutants
- Removes liquefied impurities
- Helps clear turbid water
- In pre-packed media bags
- PRE-COLONIZED WITH MICROBE-LIFT DRY HETEROTROPHIC BACTERIA

SIZE	ITEM #	TREATS	APPLICATION RATE
5 PCS./32 OZ. BAGS	PCARZBAGS	375 GAL/12 WKS 750 GAL/6 WKS 1,500 GAL/3 WKS	For best results, change the bags every 6 weeks. Rinsing this
10 PCS./32 0Z. BAGS	PCARZBAGM	750 GAL/12 WKS 1,500 GAL/6 WKS 3,000 GAL/3 WKS	filter bag will only remove the loose debris from the carbon, not the absorbed impurities. Use 1 bag for up to 150 gallons of pond
15 PCS./32 OZ. BAGS	PCARZBAGLG	1,125 GAL/12 WKS 2,250 GAL/6 WKS 4,500 GAL/3 WKS	water. Test your pond water weekly!

PLEASE NOTE: DUE TO MANY REQUESTS, WE ARE NOW PACKING ZEOLITE AND ACTIVATED CARBON IN SEPARATE BAGS. MANY CUSTOMERS WISH TO USE THEIR OWN FORM OF CARBON TO ZEOLITE RATIOS.



### **BULK ACTIVATED CARBON PELLETS**

- Removes odors
- Removes colors
- Removes medications
- Removes organic pollutants
- Removes liquefied impurities

SIZE	ITEM #	TREATS	APPLICATION RATE			
5 LBS. 3 OZ.	CARMD	UP TO 1,000 GALS.	<b>Small Ponds:</b> Typically, 1 lb. per 200 gals. (750 L.) of pond water for 2-3 mos.			
9 LBS. 12 OZ.	CARLG UP TO 1,800 GALS.		Medium Ponds: 2-3 lbs. per 500 gals. (1875 L.) of pond water for 2-3 mos.			
22 LBS.	CARXL	UP TO 4,400 GALS.	Large Ponds: Approximately 5 lbs. per every 1,000 gals. (3750 L.) of pond water for 2-3			
55 LBS.	CARBAG	UP TO 11,000 GALS.	months depending on the load of debris or discoloration.			



### **SUPER ACTIVATED CARBON**

- Removes odors and colors
- Removes medications
- Removes organic pollutants
- Removes liquefied impurities
- Highest grade available\*
- Lasts twice as long as most carbons
- Treats twice as much as most carbons
- In pre-packed media bags
- PRE-COLONIZED WITH MICROBE-LIFT DRY HETEROTROPHIC BACTERIA

SIZE	ITEM #	TREATS	APPLICATION RATE		
5 PCS./16 OZ. BAGS	PCARBAGS	375 GALS./12 WKS 750 GALS./6 WKS 1,500 GALS./3 WKS	Carbon absorbs impurities, rinsing the bags will only re- move the loose debris and not		
10 PCS./16 0Z. BAGS	PCARBAGM	750 GALS./12 WKS 1,500 GALS./6 WKS 3,000 GALS./3 WKS	the absorbed impurities. Use 1 bag for up to 150 gallons of pond water. Change the bags every 6 weeks. Test your pond		
15 PCS./16 OZ. BAGS PCARBAGL		1,125 GALS./12 WKS 2,250 GALS./6 WKS 4,500 GALS./3 WKS	water weekly!		



800.645.2976 www.MicrobeLift.com

### **BIOLOGICAL MINI PADS**

- Allows for high water flow without clogging
- Fits into most filters and skimmers
- Traps suspended dirt and debris
- Put into Master Media Bags for direct placement in the pond
- May be replaced or cleaned and re-colonized
- PRE-COLONIZED WITH MICROBE-LIFT LIQUID NITRIFYING BACTERIA

SIZE	ITEM# TREATS		APPLICATION RATE	
1.75 GAL. NITE-OUT II BACTERIA & 250 PCS. MINI PADS	PMBSPADS	CEE LADEL	After cleaning be sure to re-colonize the Biological Mini Pads by soaking in MICROBE-LIFT/	
2.75 GAL. NITE-OUT II BACTERIA & 500 PCS. MINI PADS	PMBSPADM	SEE LABEL	Nite-Out II™, nitrifying bacteria for immediate nitrification. For best results change the Mini Pads every season.	

# MICROBE-LIFT® Pond Professional/Lake Management



# PBL PROFESSIONAL BLEND LIQUID

(VEGETATIVE CULTURES)

A blend of microbes that contain specially formulated strains of bacteria manufactures for use by landscape, irrigation and pond professionals. Contains photosynthetic bacteria.

SIZE	ITEM #	TREATS	APPLICATION RATE				
32 OZ. 10F	10PBLXQ	UP TO 50,000 GALS.	Pond Volume (Gals.)	1st App. (Purge)	Next 4 Weeks (Once per Wk.)	Maintenance	
	IOI DEAG		80-200	3 oz.	2 oz.	2 oz.	
			201-500	10 oz.	3 oz.	3 oz.	
1 GALLON 10PBL		UP TO 300,000 GALS.	501-1,000	12 oz.	4 oz.	4 oz.	
	10PBLXG4		1,001-5,000	16 oz.	6 oz.	6 oz.	
			5,001-10,000	32 oz.	16 oz.	16 oz.	
		G6 UP TO 300,000 GALS.	10,001-50,000	64 oz.	28 oz.	28 oz.	
1 GALLON 10PBLX	10PBLXG6		50,001-100,000	1 gal.	48 oz.	48 oz.	
			100,001-300,000	2 gal.	1 gal.	1 gal.	
5 GALLON 10		UP TO 1,500,000 GALS.	300,001-500,000	4 gal.	1.5 gal.	1.5 gal.	
	10PBLX5G		500,001-1,000,000	8 gal.	3 gal.	3 gal.	
			1,000,001-2,000,000	20 gal.	4 gal.	3 gal.	

#### NOT FOR CONSUMER USE.

SIZE	ITEM #	TREATS	APPLICATION RATE				
50 PCS. - 2 OZ. PACKETS	10PBD2X50	SEE LABEL	Pond Volume (Gals)	1st App. (Purge)	Next 4 Wks. (Once per Wk.)	Mainte- nance	
100 - 2 OZ. PACKETS	10PBD2X100		80-500	1	1	1	
			501-1,000	2	2	2	
			1,001-5,000	3	3	3	
200 - 2 OZ.	10PBD2X200		5,001-7,500	4	4	4	
PACKETS			7,501-10,000	5	5	5	
25 PCS. - 8 OZ. PACKETS	10PBD8X25		5,001-10,000	2	1	1	
			10,001-50,000	8	3	3	
			50,001-100,000	12	5	5	
			100,001-300,000	20	8	8	
50 PCS. - 8 OZ. PACKETS	10PBD8X50		300,001-500,000	28	10	10	
			500,001-1,000,000	40	16	16	
			1,000,001-2,000,000	60	24	24	

### **PBD PROFESSIONAL BLEND DRY**

A concentrated version of the popular MICROBE-LIFT consumer bacteria & enzyme packets.

Use PBD to get your pond ready for a clean and clear spring.



### **BMC BIOLOGICAL MOSQUITO CONTROL**

- Biological larvicide
- Can be used in water gardens that contain live fish and plants
- 540 square foot coverage per tsp.
- Up to 14 days activity depending on application site
- Disperses evenly in water
- No toxicity to fish or non-target invertebrates
- No adverse aesthetics to the pond
- Can be applied to areas used by or in contact with humans, animals, horses, livestock, pets, birds or wildlife.

SIZE

**GALLON** 

ITEM#

BMC1G4

• EPA Registered

Please note: Gallon size of BMC is not available for sale, use or distribution in New York state



**TREATS** 

LARGE BODIES

OF WATER

APPLICATION RATE

SEE LABEL

# MICROBE-LIFT® Pond Professional/Lake Management



### **GOLF**

- Environmentally friendly
- Creates a healthy pond environment
- Safe for fish and plants
- Breaks down dead algae

- Reduces build up of wildlife fecal matter
- Reduces noxious odors
- Contains photosynthetic bacteria

SIZE	ITEM #	TREATS	APPLICATION RATE			
			Pond Vol. (Gals)	1st App. (Purge)	Next 4 Wks. (Once per Wk.)	Maintenance
GALLON	10G0LF6		5,000-10,000	2 gals.	16 oz	16 oz.
			10,001-50,000	2-1/2 gals.	20 oz.	20 oz.
		SEE	50,001-100,000	3 gals.	24 oz.	24 oz.
		LABEL	100,001-300,000	3-1/2 gals.	1 qt.	1 qt.
5 GALLON			300,001-500,000	4 gals.	1/2 gal.	1/2 gal.
	10G0LFX5G		500,001-1,000,000	8 gals.	1 gal.	1 gal.
			1,000,001-2,000,000	12 gals.	1-1/2 gals.	1-1/2 gals.

### **ALGAWAY 60**

- Chemical algae eliminator formulated for decorative, irrigation and retention ponds, water hazards and fountains
- Eliminates most planktonic and filamentous algae quickly and efficiently so there is no plugging of irrigation lines and pumps
- Safe for irrigation, turf, and shrubs
- EPA Registered

Please note: Algaway 60 is not available for sale, use or distribution in New York state

SIZE	ITEM#	TREATS	APPLICATION RATE
32 OZ.	AAG60Q		It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Algaway 60 is used to control the growth of algae in decorative fountains and ponds
GALLON	AAG60XG4	SEE LABEL	that <u>do not contain fish</u> . For maximum effectiveness decorative fountains and ponds containing heavy algae growth should be cleared prior to using Algaway 60.  Decorative fountains and ponds having just visible algae growth require an initial dose of 1-2 fluid ounces of Algaway 60 per 1,000 gallons of water. Subsequent additions
5 GALLON	AAG60X5G		of 0.2 to 0.4 fluid ounces of Algaway 60 should be made every 5-7 days after initial treatment for maintenance. Algaway 60 is effective at both acid and alkaline pH.  Note: Cannot be used in ponds with fish and aquatic plants



### **ALGAE CONTROL SYSTEM**

A two part system for the elimination of algae and for pond ecosystem balance.

Algaway 60 will keep your pond algae free and ML/Golf will keep the water clear and the bottom free from heavy deposits of organic sediments.

Contains: 2 gallons Microbe-Lift/Algaway 60 and 4 gallons Microbe-Lift/Golf Algaway 60 is EPA Registered

Please note: Algaway 60 is not available for sale, use or distribution in New York state.

SIZE	ITEM #	TREATS	APPLICATION RATE
6 - 1 GAL	G2PACS	128,000 GALS.	SEE LABEL

# MICROBE-LIFT® Lake Management & Contractor Products

### **BIO-BLUE ENZYMES & POND COLORANT**

Specially formulated to color lakes, lagoons, decorative ponds, fountain, and water features a beautiful shade of blue

Will not stain birds, fish, pond rocks, or most concrete fountains once diluted Enzymes assist beneficial bacteria in your pond create a healthy environment.

Safe for humans, plants and aquatic life.

Mixes completely in hours.

SIZE	ITEM #	TREATS	APPLICATION RATE
8 OZ.	MLBB8	4,000 GALS.	Use 1/2 oz. per 250 gallon pond
16 OZ.	MLBB16	8,000 GALS.	Use 1 oz. per 500 gallon pond
GALLON	MLBBG4	64,000 GALS.	Use 2 oz. per 1,000 gallon pond
5 GALLON	MLBB5	320,000 GALS.	1 gallon per surface acre 4 ft. to 6 ft. deep
16 OZ.	MLBB16F	8,000 GALS.	BILINGUAL FRENCH & ENGLISH PACKAGING





### **BIO-BLACK ENZYMES & POND COLORANT**

Specially formulated to safely color reflecting ponds black
Will not stain birds, fish, pond rocks, or most concrete fountains once diluted
Enzymes assist beneficial bacteria in your pond to create a healthy environment.
Safe for humans, plants and aquatic life.
Mixes completely in hours

SIZE	ITEM #	TREATS	APPLICATION RATE
8 OZ.	BIOBLK08	4,000 GALS.	Use 1/2 oz. per 250 gallon pond Use 1 oz. per 500 gallon pond
16 OZ.	BIOBLK16	8,000 GALS.	Use 2 oz. per 1,000 gallon pond 1 gallon per surface acre 4 ft. to 6 ft. deep
16 OZ.	BIOBLK16F	8,000 GALS.	BILINGUAL FRENCH & ENGLISH PACKAGING

### **CONTRACTOR KITS**

This contractor maintenance package has all the bacteria required for a whole season. The products come in a handy carrying bucket.





# MICROBE-LIFT® Test Strips for Water Quality





### **AMMONIA TEST STRIPS**

Allows you to easily monitor ammonia levels to keep the water quality safe for fish and other aquatic life.

SIZE	ITEM #	TREATS	APPLICATION RATE
50 TEST STRIPS	TESTAMM	50 WEEKS IF USED AS DIRECTED	See label



### **PHOSPHATE TEST STRIPS**

Managing phosphate levels is the most natural way to avoid algae blooms.

I	SIZE	ITEM #	TREATS	APPLICATION RATE
	50 TEST STRIPS		50 WEEKS IF USED AS DIRECTED	See label







### **5-IN-1 TEST STRIPS**

Tests:

Nitrate

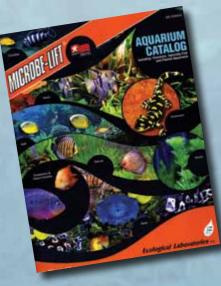
Nitrite

Total Hardness Total Alkalinity

10ttl / IIK

рΗ

		124.00	
SIZE	ITEM #	TREATS	APPLICATION RATE
50 TEST STRIPS	TEST5	50 WEEKS IF USED AS DIRECTED	See label



# SALTWATER TEST STRIPS

See our Aquarium Product catalog for more test kits that are specific to salt water fish.



### A Bacterial Diet for Fish

MICROBE-LIFT®/LEGACY foods are made by the extrusion process - not pelleting. During extrusion the cell walls of all organic substances contained in the food are disintegrated under pressure. The nutrients hidden in these cells are thus easily accessible for digesting agents, resulting in much higher digestibility in comparison with pelleted or flaked food. Additionally the LEGACY foods have an extremely low phosphorous content. This keeps fish waste to a minimum and helps to ensure superior water quality.



Feeding A Whole New Standard...

It's not just a fish food, it's a complete nutritional feeding system!



### with Nature's Building Blocks™

The concept of probiotics, or direct-fed microbial (DFM) began in the early 1950's when researchers observed a positive growth response in animals fed with antibiotics. This observation led researchers to theorize that intestinal microflora may play a role in health and vitality. Continued research has determined that a delicate balance exists in the intestinal tract between beneficial and potentially harmful bacteria. The balance of these two groups of bacterial is an important factor.

Microbial balance in the fishes' intestinal tract may be upset by a stressor, such as shipping, diet change, water quality/temperature change, environmental change, addition of new aquatic life, etc. If the intestinal population of beneficial bacteria decrease and the potentially harmful bacteria increase, it is possible to compromise fish health and performance. Additionally, koi and goldfish have no stomachs so it is important that enzyme producers survive and germinate in the intestine.

Ecological Laboratories, Inc. has specifically selected two strains of Bacillus (B. subtilis and B. licheniformis) for inclusion in all of its fish foods. These two strains have been selected for their efficient enzyme production and other metabolite-producing capabilities under intestinal tract conditions. These two strains have been tested for 1) Strain, 2) Efficacy and 3) Safety. They are F.D.A. (United States) and E.U. (European Union) approved. These strains were extensively studied and found to be non-genetically modified, to be genetically stable and to produce no toxins. Environmental impact studies were also done. Being a natural product, the two select strains pose no threat in any of the above areas.

The strains in Nature's Building Blocks<sup>TM</sup> were specifically selected from over 200 other Bacillus organisms using an extensive strainscreening process. The two strains were chosen for the following characteristics:

- Spore forms so they would survive extrusion conditions
- Natural nonpathogenic microorganisms
- Utilize a large number of carbohydrates for their growth
- Secrete a range of relevant enzymes (protease, lipase, amylase)

The strains in Nature's Building Blocks<sup>TM</sup> produce and secrete a variety of enzymes. These enzymes break down carbohydrates, proteins and fats into smaller, more easily digested nutrients. The nutrients are used for growth, health and vitality. This is especially important in fish that have no stomach and use their intestinal tract for digestion.

Please Note: In addition to the above, the MICROBE-LIFT line of LEGACY Koi and Goldfish foods taste good! Just ask your fish!

### The Microbe-Lift® / LEGACY™ 7-Day Nutritional Feeding System

Koi will eat practically anything humans will eat. They are classified as "omnivores," which means they will eat foods which are derived from plants and animals. It is important to make sure your koi get fed a daily diet that is "well balanced." The MICROBE-LIFT/LEGACY 7 Day Balanced Feeding System<sup>TM</sup> is prepared to provide the highest level of all required nutrients. All six nutrients are formulated into all MICROBE-LIFT/Koi & Goldfish Foods. There are proteins, carbohydrates, fats, vitamins, minerals and water (moisture content). These nutrients provide your koi with body heat, energy, growth material and strengthen their immune system. Every koi has its own nutrient requirements due to its individual size, sex, environment and genetic make-up. Koi are ravenous feeders. They will consume a lot of food in short periods. Koi have no stomach, so while we say it is important to feed them at least twice a day, morning and evening, smaller feedings more often is the more preferred method.

Water temperature is the most important factor in determining what kind of food to feed your fish. The quantity of food required also depends on the size of the fish. The koi's "biological rate" is the rate at which the energy derived from their food is utilized (metabolic rate). It is influenced by the temperature of your pond's water.

Depending on water temperature, choose one of the three primary foods and feed it three days per week (every other day). Alternate with the two supplemental foods (Fruits and Greens and Immunostimulant<sup>TM</sup>, four days per week (every other day). When following the MICROBE-LIFT/LEGACY 7 Day Balanced Feeding System<sup>TM</sup> your fish will have a totally balanced diet while achieving maximum health benefits.

# MICROBE-LIFT®/Legacy-Not Just A Fish Food

# It's a complete nutritional feeding system!

The MICROBE-LIFT/LEGACY<sup>TM</sup> Nutritional Feeding System is comprised of the finest cold water fish food formulas on the market today. Each food is manufactured with the highest quality ingredients selected for optimum growth and the latest technology for digestibility and color enhancement. All MICROBE-LIFT /  $LEGACY^{TM}$  foods contain the lowest ash content and the highest percentage of digestibility.

### **Formulation**

Dr. Carl Webster has served as our consultant in the formulation of the MICROBE-LIFT/LEGACY™ Nutritional Feeding System. Dr. Webster is currently a professor at one of the top aquaculture research centers in the United States and is also principal investigator for aquaculture nutrition.

### Education

In addition to earning his Ph.D. in Aquaculture (finfish and crustacean nutrition) from Auburn University in 1989, Dr. Webster received his B.A. in Zoology from Drew University in 1982 and his Master's degree in Herpetology from Southern Illinois University at Edwardsville in 1984.

### **Research Focus**

Dr. Webster's research is focused on clarifying the nutritional requirements of aquaculture species with actual or potential economic importance to the United States, to design and implement basic and applied nutritional experiments on finfish and crustacean aquaculture species, to design and develop a finfish and crustacean nutrition program, and to assist interested producers and feed mills in formulation of nutritious, economically viable aquaculture diets. Currently, Dr. Webster is working on crustacean/finfish nutrition and diet formulation.



Dr. Carl Webster

Specs for MICROBE-LIFT Fish Feed						
NAME OF FEED	SIZE (LENGTH)	COLOR	SHAPE			
FRUITS AND GREENS	0.5 - 1.0 CM	REDDISH BROWN	MEDIUM ROD			
HIGH GROWTH & ENERGY	0.3 - 0.7 CM	REDDISH BROWN	MEDIUM SPHERICAL ROD			
IMMUNOSTIMULANT	0.4 - 1.0 CM	LIGHT BROWN	MEDIUM ROD			
MINI PELLETS	0.1 - 0.2 CM	BROWN	SMALL SPHERICAL ROD			
SUMMER STAPLE	0.3 - 0.5 CM	GREENISH BROWN	MEDIUM SPHERICAL ROD			
WHEAT GERM	0.3 - 0.5 CM	BROWN	MEDIUM ROD			
SINKING PELLETS	0.3 - 0.7 CM	BROWN	MEDIUM ROD			
BIG BITES	0.6 - 0.8 CM	GREENISH BROWN	BIG SPHERICAL ROD			





### A Source of Live (Viable) Naturally Occurring Microorganisms

# SUMMER STAPLE FOOD™

### with Added Color Enhancers

As the warmer weather sets in, begin increasing the frequency and quantity of your feeding. The Summer Staple Food has the animal protein and color enhancers that are needed during this season. The added color enhancers are made up of astaxanthin (crab shell), spirulina and krill, which all promote brilliant color development.

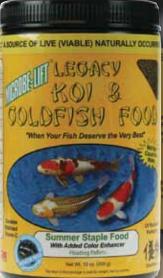
CONTAINS STABILIZED VITAMIN C



Cloud the Water

Will Not









4 LBS. 12 OZ.

2 LBS.

### **Primary Food**

Feed a Primary food every other day, 3 days per week. 10 OZ.



SIZE	ITEM #	GUARANTEED ANALYSIS	
10 OZ.	MLLSSSM	Crude Protein (min.) 36%	•
2 LBS.	MLLSSMD	Crude Fat (min.) 6% Crude Fiber (max.) 5%	•
4 LBS. 12 OZ.	MLLSSLG	Moisture (max.) 8%	•
14 LBS.	MLLSSXL	Ash (max.) 9% Phosphorus (max.) 1.3%	•
40 LBS.	MLLSSBAG	Copper (min.) 7 mg/kg	•

### **Contains**



### A Source of Live (Viable) Naturally Occurring Microorganisms

# LEGACY

# **COLD WEATHER FOOD** (WHEAT GERM)

Spring/Fall Formula - Floating Pellets

In the cold weather during spring and fall when the night-time temperature goes below 65° F (18° C) feed the Cold Weather formula. When the pond water's temperature drops, the fish require a highly digestible cool-water diet. The cold water diet is made with lesser amounts of protein but contains wheat germ which is easily digested and also contains a higher level of fats.

### **PRIMARY FOOD**

Feed a Primary food every other day, 3 days per week.

### **CONTAINS STABILIZED VITAMIN C**

SIZE	ITEM #	GUARANTEED ANALYSIS
12 OZ.	MLLWGSM	Crude Protein (min.) 32%
2 LBS. 4 OZ.	MLLWGMD	Crude Fat (min.) 7% Crude Fiber (max.) 5%
5 LBS. 4 OZ.	MLLWGLG	Moisture (max.) 8%
14 LBS. 8 OZ.	MLLWGXL	Ash (max.) 8% Phosphorus (max.) 1.3%
40 LBS.	MLLWGBAG	Phosphorus (max.) 1.3% Copper (min.) 7 mg/kg







2 LBS. 4 OZ.

12 OZ.

5 LBS. 4 OZ.

# LEGACY

### **FRUITS & GREENS**

### Made with Summer Staple Food™

As far as we know, Ecological Laboratories is the first fish food manufacturer to commercially produce this type of food. Variety is the spice of life. If you don't have time to cut up fruits and vegetables for your pond fish, give them this "fruits and greens" blend.

We've done the cutting and blending for you. There are apples, apricots, kiwis, mangos, papayas,

peaches, pears, broccoli, cabbage, peas, red peppers, tomatoes, zucchini and spinach in this scientific blend.



Feed a Supplemental food every other day, 4 days per week.

### **CONTAINS STABILIZED VITAMIN C**

SIZE	ITEM #	GUARANTEED ANALYSIS		
10 OZ.	MLLFGSM Crude Protein (min.)		36%	
2 LBS.	MLLFGMD	Crude Fat (min.) Crude Fiber (max.) Moisture (max.)	6%	
4 LBS. 8 OZ.	MLLFGLG		5% 8%	
13 LBS. 4 OZ.	MLLFGXL	Ash (max.)	8%	
40 LBS.	MLLFGBAG	Phosphorus (max.)	1.3%	







Will Not



4 LBS, 8 OZ

44



### A Source of Live (Viable) Naturally Occurring Microorganisms

# EGACY **GROWTH & ENERGY FOOD**

### with Added Color Enhancers

In the late spring when the warmer temperatures arrive, koi and goldfish need a boost of protein for growth since they have depleted their fat reserves over the winter. In the fall a higher protein diet is also required since pond fish need to bulk up in preparation for their winter fast. Use this feed at a minimum temperature of 66° F (19° C). Pond fish really start to grow at this temperature. You can use this feed up to four times per day. Feed between 2% - 3% of the fishes' body weight per day.



### **Primary Food**

Feed a Primary food every other day. 3 days per week.

SIZE	ITEM #	GUARANTEED ANALYSIS
12 OZ.	MLLHGESM	Crude Protein (min.) 40%
2 LBS. 4 0Z.	MLLHGEMD	Crude Fat (min.) 7% Crude Fiber (max.) 4%
5 LBS. 4 OZ.	MLLHGELG	Moisture (max.) 4%
14 LBS. 8 OZ.	MLLHGEXL	Ash (max.) 8% Phosphorus (max.) 1.3%
40 LBS.	MLLHGEBAG	Phosphorus (max.) 1.3% Copper (min.) 7 mg/kg





12 OZ.



**CONTAINS STABILIZED VITAMIN C** 

# LEGACY

# **Summer Staple Food**<sup>™</sup>

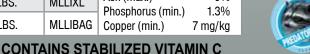
# WITH MONTMORILLONITE CLAY (IMMUNOSTIMULANT)

Feed above 66° F (19° C). Alternate feeding the two supplemental foods every other day (four days per week). Due to their lower protein content they can be alternated with the Cold Weather formula during colder weather as well. The Montmorillonite Clay provides additional minerals which help provide more immunity against viruses commonly found in pond environments. Additional quantities of vitamins are also blended into this food. Montmorillonite Clay also acts as a toxin binder by neutralizing the metabolic toxins.



Feed a Supplemental food every other day, 4 days per week

SIZE	ITEM #	GUARANTEED AN	IALYSIS
10 OZ.	MLLISM	Crude Protein (min.)	36%
1 LB. 12 OZ.	MLLIMD	Crude Fat (min.) Crude Fiber (max.)	6% 5%
4 LBS. 8 OZ.	MLLILG	Moisture (max.)	8%
13 LBS.	MLLIXL	Ash (max.)	9%
40 LBS.	MLLIBAG	Phosphorus (min.) Copper (min.)	1.3% 7 mg/kg





Resilience



1 IB. 12 07.

45

# Contains



### A Source of Live (Viable) Naturally Occurring Microorganisms

# LEGACY VARIETY MIX

# Floating Pellets and Sticks

MICROBE-LIFT Variety Mix is the answer for how to feed a blend of fruits, greens, carbohydrates, protein, wheat germ, and vitamins to your koi and pond fish. Contains 25% of each of our most popular Legacy foods: Summer Staple, Fruits and Greens, Summer Staple with Montmorillonite Clay, and Growth and Energy.



### **PRIMARY FOOD**

Feed a Primary food every other day,
3 days per week.

### **CONTAINS STABILIZED VITAMIN C**

SIZE	ITEM#	GUARANTEED ANALYSIS
11 OZ.	MLLVMSM	Crude Protein (min.) 37%
2 LBS. 4 0Z.	MLLVMMD	Crude Fat (min.) 6.25% Crude Fiber (max.) 4.5%
5 LBS.	MLLVMLG	Moisture (max.) 4.5%
14 LBS. 8 OZ.	MLLVMXL	Ash (max.) 8% Phosphorus (min.) 1.3%
40 LBS.	MLLVMBAG	Phosphorus (min.) 1.3% Copper (min.) 7 mg/kg







5 LBS

11 OZ.

# LEGACY SINKING FOOD

# $\textbf{Summer Staple Food}^{\text{\tiny TM}}$

Sinking (transitional) food may be used when adding new fish to the pond. Generally new fish are shy until they become more familiar with their surroundings and new neighbors. MICROBE-LIFT/Sinking Food Pellets are a great way to make sure your fish receive balanced meals while adjusting to their new surroundings. Additionally, sick fish don't come to the pond's surface and feed off the bottom of the pond.

2 LBS. 4 OZ.



Feed a Primary food every other day, 3 days per week.

### **CONTAINS STABILIZED VITAMIN C**

SIZE	ITEM#	GUARANTEED ANALYSIS
14 OZ.	MLLSPSM	Crude Protein (min.) 36%
3 LBS.	MLLSPMD	Crude Fat (min.) 6% Crude Fiber (max.) 5%
5 LBS. 12 OZ.	MLLSPLG	Moisture (max.) 8%
18 LBS. 8 OZ.	MLLSPXL	Ash (max.) 9% Phosphorus (max.) 1.3%
40 LBS.	MLLSPBAG	Copper (min.) 7 mg/kg





3 LBS.

5 LBS. 12 OZ.

### **Contains**



### A Source of Live (Viable) Naturally Occurring Microorganisms



# LEGACY Mini Pellets

hen your little fish deserve the very best!

The stabilized Vitamin C in these mini pellets help to promote proper tissue development.

with Nature's Building Blocks





SIZE	ITEM #	GUARANTEED ANALYSIS
6 OZ.	MLLMPXS	Crude Protein (min.) 36%
12 OZ.	MLLMPSM	Crude Fat (min.) 5%
2 LBS. 4 OZ.	MLLMPMD	Crude Fiber (max.) 4.5%
6 LBS.	MLLMPLG	Moisture (max.) 8% Ash (max.) 8%
17 LBS.	MLLMPXL	Phosphorus (min.) 1%
40 LBS.	MLLMPBAG	Copper (min.) 7 mg/kg



12 OZ.

6 OZ.

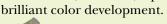
# LEGACY

# **BIG BITES**

# **Floating Pellets**

with Added Color Enhancers

Summer Staple floating pellets in a larger pellet size (0.7-1.1 cm) for feeding your larger Koi has the animal protein and color enhancers that are needed during this season. The added color enhancers are made up of astaxanthin (crab shell), spirulina and krill, which all promote





SIZE	ITEM #	GUARANTEED ANALYSIS
2 LBS. 12 OZ.	MLLBBMD	Crude Protein (min.) 36% Crude Fat (min.) 6%
6 LBS.	MLLBBLG	Crude Fiber (max.) 5% Moisture (max.) 8%
16 LBS. 12 OZ.	MLLBBXL	Ash (max.) 9%
40 LBS.	MLLBBBAG	Phosphorus (min.) 1.3% Copper (min.) 7 mg/kg



2 LBS, 12 07.

## MICROBE-LIFT® Birdbath/Fountain and Statuary



### **BIRD BATH CLEAR**

Uses 2 unique proprietary technologies. One prevents the buildup of stains and mineral deposits, the other uses bio-enzymatic activity to keep the water clear and free of organic debris.

Specially formulated for birdbaths inhabited by Birds, Small Fish, Frogs, etc.

SIZE	ITEM #	TREATS	APPLICATION RATE
4 OZ.	10BBC4	17 TREATMENTS	NEW/CLEAN BIRDBATH Pour 1 capful per week into water. DIRTY BIRDBATHS
		28	Clean the birdbath with ML/BIRDBATH & STATUARY CLEANER - a natural, 100% biodegradable, soy-based cleaner that works symbiotically with Birdbath Clear. Pour one capful per week directly into the water.
		DE DE DE	

Comes with FREE tabletop display



### **COMBO PACK!**

Contains: 12 pcs. 10BBC4 and 12 pcs. 10TTFC4 Comes with FREE tabletop display Item # 10BBTTX24



### **SMALL FOUNTAIN CLEAR**

Uses 2 unique proprietary technologies. One prevents the buildup of stains and mineral deposits; the other uses bio-enzymatic activity to keep the water clear, and filters and pumps free of organic debris.

Specially formulated for smaller fountains.

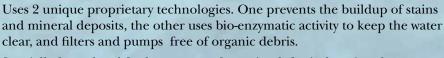
All natural ingredients safe for birds, fish, aquatic wildlife, humans, pets, aquatic plants, and lawns.

SIZE	ITEM #	TREATS	APPLICATION RATE
4 OZ.	10TTFC4	UP TO 34 TREATMENTS	CLEAN FOUNTAIN  Small fountains under 1 gallon capacity: pour 1/2 capful per week directly into the water. For every 5 gallons, add one capful weekly.  DIRTY FOUNTAIN  Clean the fountain with ML/BIRDBATH & STATUARY CLEANER, then follow directions above.



Comes with FREE tabletop display





Specially formulated for larger water fountains & for indoor/outdoor waterfalls.

All natural ingredients safe for birds, fish, aquatic wildlife, humans, pets, aquatic plants, and lawns.

I	SIZE	ITEM #	TREATS	APPLICATION RATE
	16 OZ.	10LFC16	SEE LABEL	CLEAN FOUNTAIN  Pour 1 capful per week directly into the water for each 100 gallons of water.  DIRTY FOUNTAIN  Clean the fountain with ML/BIRDBATH & STATUARY CLEANER, then follow directions above.



Comes with FREE tabletop display

# MICROBE-LIFT® Birdbath/Fountain and Statuary



### **ALGAWAY 5.4 FOR FOUNTAINS**

Chemical algaecide for fountains containing live fish and plants EPA Registered

SIZE	ITEM #	TREATS	APPLICATION	RATE	
1 OZ.	ALGAF01	355 GALS.	Vol. of Water	Unit of M	leasure
1 02.	ALGAFUI	SSS GALS.	10 gal/37.85 L	6 drops	
2 OZ.	ALGAF02	710 GALS.	30 gal/114 L	18 drops	1/2 tsp.
4 OZ.	ALGAF04	1,419 GALS.	50 gal/189 L	30 drops	

### **BMC BIRDBATH MOSQUITO CONTROL**

Biological larvicide for bird baths

Up to 14 days activity depending on application site

Disperses easily in water

Can be applied to areas used by or in contact with humans, animals, horses, livestock, pets, birds or wildlife.

SIZE	ITEM #	TREATS	APPLICATION RATE
1/2 OZ.	BMC.5	1 bottle treats 3 average birdbaths (of 1-1/2 gal) weekly for up to 2 years.	Use 1 drop per birdbath per week. The average birdbath is 3" deep by 12" round and contains 1.5 gallons of water.

# BMC BIRDBATH MOSQUITO CONTROL DISPLAY



SIZE	ITEM #	CONTAINS:
1/2 OZ.	BMCBBA	12 pcs. BMC.5 FREE Tabletop Display



# SOY-BASED BIRDBATH AND STATUARY CLEANER

- A special blend of soy-based chemistry cleans birdbaths, garden statues, sculptures, stone, brick and pumps.
- Uses renewable soybean resources
- Powerful and safe removal of organic debris and mineral deposits
- Environmentally friendly. Not harmful to fish or other aquatic life.
- Safe for use around plants and grass

SIZE	ITEM #
8 OZ.	10SBSC8
32 OZ.	10SBSC



# SOY-BASED BIRDHOUSE AND BIRDFEEDER CLEANER

- A proprietary blend of soy-based chemistry cleans all plastic, vinyl, fiberglass
   metal birdhouses and resin/poly birdfeeder surfaces
- Uses renewable soybean resources
- Powerful and safe removal of organic debris and mineral deposits
- Environmentally friendly. Safe for use around plants and home

SIZE	ITEM#
8 OZ.	10SBBC8
32 OZ.	SBBC32





# 

Dealer Partnership Program
(Point-of-Purchase)







# CREATING COMMITTED DEALER PARTNERSHIPS

### We now present our DEALER PARTNERSHIP (POP) PROGRAM

Purchases from our MICROBE-LIFT product line may apply towards a 3% Advertising/POP credit redeemable not only for print ads but for store POP as well. There is NO dollar minimum for you to qualify! Here's how:

- **1.** Place an order from our Dealer Partnership POP Program Catalog.
- 2. Supply copies of your distributor invoices with all MICROBE-LIFT purchases from the past year highlighted.
- **3.** Up to 3% of your previous year's total purchases can be credited to your POP order.
- **4.** Mail your invoices to: Ecological Laboratories, Inc. Dealer Partnership POP Program P. O. Box 184, Malverne, NY 11565

### Our CONSUMER AWARENESS PROGRAMS include:

- The largest consumer advertising program for water quality products.
- Participation in National Consumer Pond and Koi Shows with free product samples for attendees.
   Visit our website for our annual show calendar!
- A web-based nationwide retail dealer directory sign up now!
- Free seasonal Magazine The ML/Watergardener. Call for qualifications to participate!
- Consumer discount coupons.

### MICROBE-LIFT SIGN MARKER & STAKE

Demonstrate first-hand to consumers the MICROBE-LIFT Miracle using MICROBE-LIFT products in your nursery ponds. Then clearly mark them with this tough, durable, 9-gauge galvanized steel ML/ Marker Stake with a preprinted poly-propylene card indicating that MICROBE-LIFT is keeping the water clean and clear! (Indoor/outdoor)

# This Pond is Treated With

### #POPSTEPSTAKE

BUYING NEW KO

### CONSUMER SUPPORT

At Ecological Laboratories, we truly value the importance of maintaining a close relationship with the consumer - *your customer* - since they are the end-user and ultimate continued growth of the MICROBE-LIFT family of products. To further assist and support them, we now

proudly offers a Monthly Email Newsletter, a Seasonal Magazine, Coupons and Sample Koi Food Packets!

### SEASONAL MAGAZINE

Our full-color *ML/WATERGARDENER Magazine* is not only *beautiful*, but chocked full of current information your consumers won't want to be without! The articles are written by renowned professionals—well-respected in their fields!

Available online in the Media section of our web site

- www.MicrobeLift.com



### MONTHLY EMAIL ML/NEWSLETTER

Well written and designed, many consumer's truly appreciate and enjoy the convenience of receiving our monthly email updates!

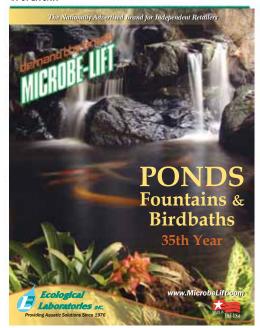


COUPONS

For more information call 800.645.2976 or visit our website www.MicrobeLift.com

Ecological Laboratories Inc. offers its dealers a large variety of marketing support and point-of-purchase materials, featured on the following pages to help promote, display, distinguish and, ultimately, sell our growing family of products. We also want to help educate both our dealers and our customers as to the incredible, all-natural benefits of the MICROBE-LIFT brand.

### #POPLITCATE



# 2011 PONDS FOUNTAINS & BIRDBATHS CATALOG

Our 2011 product line is featured in this full-color 60-page catalog, containing explicit product descriptions dosage rates and other important information.

### CATALOGS & CATALOG HOLDERS

We offer several clear, plastic catalog holders in sizes to fit our catalogs, sell sheets, magazine and/or guides.





### FAQs and Q&A BROCHURES

Real consumer questions are addressed in these three informative brochures! Our new FAQ BROCHURE is chocked full of answers to Frequently Asked Questions we receive. Mark J. Krupka, Ecological's VP & Technical Director, and Carolyn Weise, Consumer Relations Manager, answer questions Q&A style, in two digest-sized brochures, featuring full-color product photographs with descriptions.





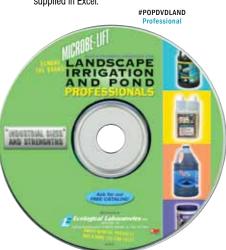
### PRODUCT USAGE GUIDE

As our product line has grown, so has the need for this invaluable resource to help BOTH dealers and consumers easily understand which MICROBE-LIFT products to use, when to use them, what each product does, as well as additional product information. The Guide also includes a helpful tip section all pond owners will find useful.

### DIGITAL IMAGERY CDs & DVDs

• As a service to our dealers, we offer a digital image library of the complete MICROBE-LIFT product line, conveniently available upon request in a DVD, formatted for both MAC & PC. All images are in: hi- & lo-resolutions; full-color & B/W; eps, tiff, bmp and jpg files for print or web use.

 Also available upon request: PRICE LISTS for our full product line—including UPC codes and case pack quantities supplied in Excel.



#POPDVDCON
Consumer

Consu

Ecological Laboratories provides CDs and DVDs featuring promotional and in-store support and education for our dealers as well as their consumers. TRAIN PERSONNEL and/or INFORM CUSTOMERS by playing our DVDs in-store!

CDs & DVDs

POPDVDEAL Dealer

MICHIEL LIFT

POND PRODUCTS

DVD

TRAINING PERSONNEL

CONSUMER, DEALER & LANDSCAPER DVDs

Mark J. Krupka, Ecological Laboratories' VP & Technical Director, narrates these informative DVDs. LANDSCAPE, IRRIGATION & POND PROFESSIONALS features our professional pond product line, which also corresponds with our catalog of the same name. Our POND PRODUCT DVDs (featuring consumer products) come in two versions: one to educate Consumers (great for in-store play); the other for Dealers to use to train personnel.



### VINYL OUTDOOR FISH FOOD BANNERS W/GROMMETS

# POND FISH PRODUCT POINT-OF-PURCHASE

Ecological Laboratories Inc. offers a variety of pond fish POP and sales support, like distinctive panners, displays and a fish food refill program, all to promote our foods, treats and water treatments.



#POPBANFF 22" x 24" Banner

### PLASTIC 4-SHELF FISH FOOD DISPLAY RACK

FREE with qualifying fish food order. (See price list for details).

IN-STORE FISH FOOD REFILL PROGRAM PAPER WINDOW/WALL SIGN



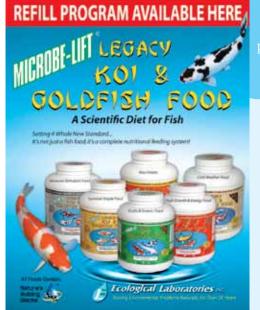
#POPRACKFFWD

WOODEN DISPLAY
FOR LEGACY FISH FOOD
w/Front & 2-Sided
Full-Color Signage

FISH FOOD

DISPENSER
#POPFOODDISP

FREE with qualifying fish food order. (See price list for details).



#POPSGNFFRF

# START AN IN-STORE REFILL PROGRAM!

Advertise with in-store posters, sample fish food packet hand-outs and easy-to-use food dispensers

for cost-effectiveness and th eco-conscious consumer!

12 gallon capacity

Easily installs in an existing display or any flat surface

All polycarbonate

Easy to clean

No cracking, yellowing or hazing

Bin always appears full with separate front-filled section

No spill spout

Self closing handle

Gravity feed

2-year manufacturer warranty

Sold individually



### FREE

### DISPLAYS & FREIGHT PLUS DISCOUNTS\*

*Ecological Laboratories*, *Inc.* offers its dealers both stationary and rolling merchandiser racks with color banners to display our products.

\* All displays are sold as net priced items. A 10% discount is included in the price. No further discounts apply! Please see current price list.

# BARLEY STRAW CONCENTRATED EXTRACT & PELLETS DISPLAY RACK

FREE Display w/Wheels & Color Vinyl Banner

**CONTAINS 2 PRODUCTS:** 

Barley Straw Concentrated Extract 24 pcs/8 oz. bottles • 12 pcs/16 oz. bottles • 12 pcs/32 oz. bottles Barley Straw Pellets+

12 pcs./2.2 lb bags • 12 pcs./4.4 lb. bags • 6 pcs./10.5 lb. bags



Also Available: 2 Additional Racks Not Shown

#BPDR

### BARLEY STRAW PELLETS+ DISPLAY RACK

CONTAINS ONLY:

Barley Straw Pellets+ 24 pcs. / 2.2 lb. bags \* 36 pcs. / 4.4 lb. bags 12 pcs. / 10.5 lb. bags

#BSVDR

# BARLEY STRAW VARIETY DISPLAY RACK

CONTAINS 3 PRODUCTS:

Barley Straw Concentrated Extract + PEAT 12 pcs./8 oz. bottles • 6 pcs./16 oz. bottles • 6 pcs./32 oz. bottles

Barley Straw Concentrated Extract
12 pcs. / 8 oz. bottles \* 6 pcs. / 16 oz. bottles \* 6 pcs. / 32 oz. bottles

**Barley Straw Pellets+** 

12 pcs. / 2.2 lb bags • 12 pcs. / 4.4 lb. bags • 6 pcs. / 10.5 lb. bags

# FREE CARDBOARD FLOOR DISPLAY

### (UPON REQUEST)

with 36 pcs. of any combination of PL, Spring Summer Cleaner, TheraP, Autumn Winter Prep



# BIRDBATH & FOUNTAIN PRODUCT DISPLAY RACK

FREE Display (Not on Wheels) & Full-Color Header Card

#WCDR



### CONTAINS:

Small Fountain Clear 24 pcs. / 4 oz. bottles

> BirdBath Clear 24 pcs. / 4 oz. bottles

Large Fountain Clear 12 pcs. / 16 oz. bottles

Birdhouse & Birdfeeder Cleaner 6 pcs. / 32 oz. bottles

BirdBath & Statuary Cleaner 6 pcs. / 32 oz. bottles

# **OUR MOST POPULAR RACK!**



# Our POP Helps to Increase Sales!

FREE Freight! FREE Display!
Quantity DISCOUNTS!

### #MPM

POND PRODUCT DISPLAY #1 4-SHELF ROLLING MERCHANDISER

FREE Display Includes a 4-Color Vinyl Banner Shipped on a Mini Pallet

### CONTAINS:

### ML/PL

24 pcs. / 16 oz.

36 pcs. / 32 oz.

4 pcs. / gallons

### **TheraP**

6 pcs. / 32 oz. 1 gallon

### **Ensure**

6 pcs. / 32 oz. 1 gallon

### Spring/Summer Cleaner

12 pcs. / 1 lb. units

### **Autumn/Winter Prep**

12 pcs. / 32 oz.

### ML/HC

4 pcs. / gallons

### #MCM

### BIOLOGICAL MOSQUITO CONTROL DISPLAY RACK

FREE Display with a Full-Color Header Card (Not on Wheels)

### CONTAINS:

### BMC BirdBath 24 pcs. / .5 oz. bottles

BMC Small Pond 24 pcs. / 2 oz. bottles

BMC Medium Pond 12 pcs. / 6 oz. bottles

> BMC Large Pond 12 pcs. / 12 oz. bottles

> > BMC

Extra Large Pond 12 pcs. / 16 oz. bottles

### #NP04DR

### POND PRODUCT DISPLAY #2

FREE Display Includes a 4-Color Vinyl Header Shipped on a Mini Pallet

### CONTAINS:

### Calcium Montmorillonite Clay

12 pcs. / 2 lb. containers 12 pcs. / 4 lb. containers 6 pcs. / 6 lb. containers

### TAC

12 pcs. / 8 oz. containers 12 pcs. / 16 oz. containers 6 pcs. / 3 lb. containers 4 pcs. / 5 lb. containers

### Sludge Away 12 pcs. / 32 oz. bottles

4 pcs./gallons

Concentrated Aquatic

**Planting Media** 

6 pcs. / 10 lb. bags 3 pcs. / 20 lb. bags





### IN-STORE SIGNAGE

Ecological Laboratories Inc. has a whole new array of colorful, versatile and efficient MICROBE-LIFT Pond and Fish product signage to help distinguish our brand and drive your in-store traffic to our nationally advertised products!

# FLEXIBLE STAND WITH BANNERS

This convenient, light-weight, flexible stand is quick to set up, move, store and/or take down!
The 24" x 60" vertical, grommeted, plastic-coated vinyl banners easily attach, highlighting our MICROBE-LIFT Pond and Koi products. The banners can also be used for wall hanging!

POND & KOI PRODUCTS

Banner Only: #POPBANKOI



Banner Only: #POPBANSOLD

4 ft. x 18 in. HEADER CARDS for Gondolas or Wall Mounting

Frame Only: #POPSTANDFLEX

#POPHEADFF
Adhere w/double face tape. (Tape and gondola NOT included!)

LEGACY
KOLS
GOLDFISH FOOD
A Scientify Dest For Fish
A Scientify Dest For Fis

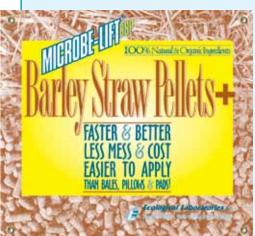


# MICROBE-LIF earth-friendly #POPBANPOND 5 ft x 2 ft Banner

### ASSORTED INDOOR/OUTDOOR VINYL BANNERS W/GROMMETS



#POPBANSCSU 22" x 24" Banne



#POPRANRP 22" x 24" Ranner



#POPBANPONDOR 22" x 24" Banner #POPSGNPONDOR Also Available as Paper Window Sign



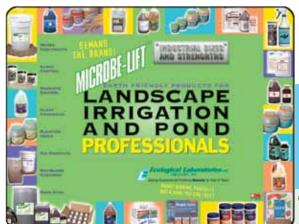
#POPBANMOSQ 22" x 24" Banner



#POPBANPONDBL



#POPRANI AND 22" x 24" Banner

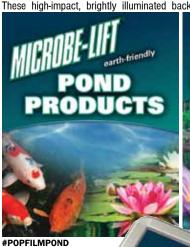


### COUNTER MATS

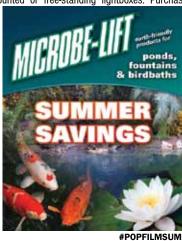
#POPCMATLAND

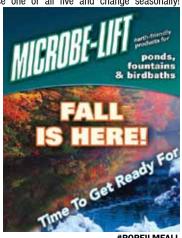
### INTERCHANGEABLE 16" X 20" BACK-LIT FILMS for Lightbox Displays

These high-impact, brightly illuminated back-lit film displays get noticed in our mounted or free-standing lightboxes. Purchase one or all five and change seasonally!









**#POPFILMFALL** 







### **ULTRA FRAME** & BASE

Exciting and modern, this sleek, curved base is paired with a versatile, ultra thin, 16" x 20" silver Snap-Frame lightbox, making film changes a snap! The lightbox easily screws onto its heavy-duty, weighted base in a **VERTICAL** 

## position only!

Pedestal Stand: #POPSTANDTHIN

Predrilled recessed D-hooks on the 3" profile Snap-Frame lightbox also make it convenient for vertical or horizontal wall hanging!





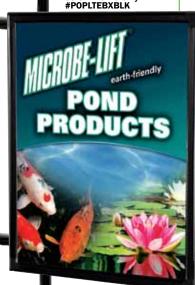
### LIGHT BOXES & BACK LIT FILMS

### BLACK FRAME LIGHT BOX & BASE

Make a bold statement with our 16" x 20" thin, black lightbox and pedestal base. Slightly thicker than the Ultra-Thin Snap Frame, this mounted lightbox easily screws into its sturdy yet lightweight 39" tilt-top, adjustable stand in a

HORIZONTAL position only.

Screw Frame Only: #POPLTEBXBLK



The light-up display frame comes with premounted D-hooks for vertical or horizontal wall hanging. Unscrew frame for quick, side-

loading film changes!

Pedestal Stand: #POPSTANDBLK

# Visit us on the web: WWW.MicrobeLift.com

To find out more about our earth-friendly products for ponds, fountains, birdbaths, lawn & garden and now aquariums!

# SIGN UP FOR OUR FREE ONLINE DEALER DIRECTORY: www.MicrobeLift.com/register

### **Our Web Site Features:**

- Complete resource center for all MICROBE-LIFT products
- Media Section:
  - An informative DVD presentations for both dealer selling education and consumer overall education on our **MICROBE-LIFT** products
  - Archived MICROBE-LIFT Watergardener Magazines and our monthly e-newsletters
- Q & A Forum: View archived Question and Answers from other MICROBE-LIFT users to learn more about pond keeping

### **Store Support**

- Catalogs: View or download all our catalogs and sell sheets. Give them out to sales staff and customers
- Trade Shows: Listing of all trade and distributor shows we are attending
- Dealer Directory: Ability for you to sign up on our FREE Online Dealer Directory, where consumers who are using our web site looking for MICROBE-LIFT dealers can find your location through a ZIP code search. Don't miss out on this FREE opportunity!
- MICROBE-LIFT Sales Reps: Fill out our form online and we will put you n touch with the MICROBE-LIFT sales rep closest to you
- Distributors: Listing of all authorized MICROBE-LIFT distributors (categorized)
- Material Safety Data Sheets: Download or view our products MSDS

### **Customer Support**

- FAQs: View our Frequently Asked Questions
- Pondkeeping 101: Learn everything you or your customers need to know about caring for your pond
- What Product Should I Use: An Interactive web page that simplifies the maintenance of ponds and water gardens
- Ask the Experts: You or any of your customers can ask our resident pond expert, Carolyn Weise any of your pond keeping questions
- Consumer Shows: Listing of all koi shows at which Ecological Laboratories will be exhibiting



### U.S.A. CORPORATE OFFICE

Lynbrook, NY 11563 E-mail: info@MicrobeLift.com www.MicrobeLift.com Tel: 800.645.2976 FAX: 516.823.3440

For International Inquiries Email: international@MicrobeLift.com

### **FACTORY & DISTRIBUTION**

2525 NE 9th Ave. Cape Coral, Florida 33909

### ASIA OFFICE (SINGAPORE)

Ecological Asia Email: gohkb@ecological-asia.com Tel. +65 64015260 FAX: +65 64013048

### MIDDLE EAST OFFICE (JORDAN & DUBAI)

MENA OFFICE Nahhas World Business Center P.O.Box 1116 Amman 11118, Jordan Tel: 00962-6-5682137 Fax: 00962-6-5665352

Email: mohamad.n@econahhas.com and/or info@econahhas.com

### **EXCLUSIVE EUROPEAN DISTRIBUTOR:**

SIBO BV. The Netherlands Tel: +31 (0)413-293918 Email: sales@sibo.nl

### ADDITIONAL UNITED KINGDOM DISTRIBUTOR:

Great Britain, Ireland & Scotland J & K Aquatics, Ltd. Email: info@jnk-aquatics.co.uk.

### **EXCLUSIVE AUSTRALIA DISTRIBUTOR:**

**AVK Imports Australia** Email: avk@bigpond.net.au

### **EXCLUSIVE ISRAEL DISTRIBUTOR:**

Global Pets

Email: g-pets@actcom.co.il



THE USA