

# Contents

<b>INTRODUCTION .....</b>	<b>5</b>
The Vision .....	5
Chapter Overview .....	7
<b>AQUARIUM ENVIRONMENTS .....</b>	<b>8</b>
The Fish Only System .....	8
The Reef System .....	9
<b>COMPONENTS OF A REEF .....</b>	<b>10</b>
Main Component Breakdown .....	10
Aquariums .....	11
<i>Aquarium Size</i> .....	11
<i>Aquarium Shape</i> .....	12
<i>Aquarium Type</i> .....	12
<i>Choosing a Location For Your Aquarium</i> .....	13
Filtration .....	14
<i>Biological Filtration</i> .....	14
<i>Mechanical Filtration</i> .....	15
<i>Chemical Filtration</i> .....	15
<i>Protein Skimming</i> .....	16
<i>The Wet-Dry Trickle Filtration System</i> .....	16
<i>Other Filtration Methods</i> .....	18
Lighting .....	20
<i>Day Versus Dusk Bulbs</i> .....	21
<i>Metal Halide Lighting</i> .....	22
<i>T5 Fluorescent Lighting</i> .....	23
<i>Power Compact Lighting</i> .....	23
<i>VHO Lighting</i> .....	24
Sand Beds .....	24
Live rock.....	25
<b>INSTALLING YOUR AQUARIUM.....</b>	<b>26</b>
Checklist Before Installation .....	26
Positioning Your Aquarium .....	27
Setting Up The Filtration System.....	27
<i>Plumbing the Filtration System</i> .....	29
<i>Installing The Protein Skimmer</i> .....	30
Putting the Sand and Live Rock In The Tank .....	30
Electrical Wiring .....	30
Installing Miscellaneous Equipment.....	32

Lighting .....	33
Adding the water .....	33
Turning It On .....	34
Cycling The Tank .....	35
<i>What is meant by cycling the tank?</i> .....	35
<i>How do I cycle the tank?</i> .....	36
<i>Can I add fish during the cycle period?</i> .....	36
<b>ON-GOING MAINTENANCE .....</b>	<b>37</b>
Monitoring .....	37
Water Changes and Top Offs .....	37
<i>Making your own saltwater</i> .....	38
<i>Water Top Offs</i> .....	39
Chemical Testing .....	40
<i>Calcium (Ca)</i> .....	41
<i>Alkalinity (aka Carbonate Hardness)</i> .....	41
<i>Salinity (aka Specific Gravity)</i> .....	42
<i>Temperature</i> .....	42
<i>PH</i> .....	43
<i>Magnesium (Mg)</i> .....	43
<i>Phosphate (PO<sub>4</sub>)</i> .....	44
<i>Ammonia (NH<sub>3</sub>)</i> .....	44
<i>Nitrite (NO<sub>2</sub>)</i> .....	45
<i>Nitrate (NO<sub>3</sub>)</i> .....	45
<i>Strontium</i> .....	46
<i>Iron</i> .....	46
<i>Iodine/Iodide</i> .....	46
Chemical Additives.....	46
Cleaning .....	48
Sample Maintenance Schedule .....	50
Tips To Prepare For Vacation .....	52
Common Problems and Their Solutions .....	53
<b>LIVESTOCK .....</b>	<b>56</b>
Choosing Livestock .....	56
Acclimating Livestock .....	56
Feeding Your Fish .....	57
Feeding Your Corals .....	59
Fish Glossary .....	61
Coral Glossary .....	69
Soft Corals Glossary .....	78
Anemone Glossary.....	83

Shrimp Glossary.....	86
Crab Glossary .....	90
Snail Glossary .....	94
Miscellaneous Invertebrate Glossary.....	100
Choosing A Cleaning Crew .....	110
Macro Algae .....	111
<b>THE JOURNEY AHEAD.....</b>	<b>115</b>
<b>INDEX.....</b>	<b>116</b>