

## CONTENTS

FOREWORD .....	11
PREFACE .....	13
ABSTRACT .....	17
RÉSUMÉ .....	18
EXTENDED ABSTRACT .....	19
RÉSUMÉ DÉVELOPPÉ .....	23
INTRODUCTION .....	29
MYTHOLOGY AND FOLKLORE .....	41
SYSTEMATIC ACCOUNT .....	49
Institutional collections and their abbreviations .....	49
Order Lampridiformes Goodrich, 1909 .....	50
Family Regalecidae Gill, 1885 .....	60
Genus <i>Agrostichthys</i> Phillips, 1924 .....	61
Genus <i>Regalecus</i> Ascanius, 1772 .....	63
Systematic characters .....	69
Key to species of <i>Regalecus</i> .....	72
<i>Regalecus glesne</i> Ascanius, 1772 .....	72
<i>Regalecus russellii</i> (Cuvier, 1817) .....	90
Neotype designation for <i>R. russellii</i> .....	100
MORPHOLOGY .....	105
Tail loss: autotomy .....	105
Terminus .....	110
Intermuscular septa .....	110

Size .....	113
Coloration and color pattern .....	114
Tuberculation .....	117
External fin supports .....	117
Two dorsal fin crests .....	117
Pectoral fins .....	118
Pelvic fins .....	120
Caudal fin .....	122
Soft anatomy .....	124
Viscera .....	124
<b>BIOLOGY .....</b>	<b>125</b>
Food habits .....	125
Parasites .....	127
Predators .....	128
Vertical orientation .....	130
Schooling? .....	132
Mortality and stranding .....	133
Longevity and growth rate .....	135
Palatability .....	136
Fecundity .....	137
<b>LIFE HISTORY .....</b>	<b>139</b>
Eggs .....	145
Larvae .....	145
Juveniles .....	147
Males and females .....	149
Pairs versus isolated individuals .....	149
<b>FOSSIL RECORD AND GEOGRAPHICAL DISTRIBUTION .....</b>	<b>153</b>
<b>BIOGEOGRAPHY .....</b>	<b>161</b>
Sea mounts .....	162
<i>Regalecus</i> occurrences including strandings .....	162
Scandinavia .....	164
British Isles .....	166
Mediterranean .....	168
Western Europe .....	169
Atlantic coast of North America .....	171
Gulf of Mexico .....	172

Southwest Atlantic (Argentina, Brazil) .....	175
Southeast Atlantic (southern Africa) .....	176
Pacific coast of the America .....	176
Australia .....	180
New Zealand .....	180
Northwest Pacific Ocean (Japan, Korea, China, Taiwan) .....	180
Indian Ocean (Tanzania, Iran, India, Indonesia) .....	184
Noteworthy miscellaneous geographical occurrences of oarfishes .....	187
Erroneous or suspect reports and hoaxes involving oarfishes .....	188
Seasonality of <i>Regalecus</i> strandings .....	192
Spates of <i>Regalecus</i> strandings and other occurrences .....	195
Populations .....	197
DNA Sequences .....	200
 DISCUSSION .....	 205
 CONCLUSION .....	 209
<i>Regalecus</i> studies of the future .....	212
 ACKNOWLEDGMENTS .....	 215
 REFERENCES .....	 225
 APPENDIX: Catalog of <i>Regalecus</i> specimens identified to species in museum collections .....	 235
<i>Regalecus glesne</i> .....	235
<i>Regalecus russellii</i> .....	251
 INDEX .....	 259