

# Contents

<b>1</b>	<b>Introduction</b> .....	1
	References .....	3
<b>2</b>	<b>A History of Animal Collections</b> .....	5
	The Beginning of Menageries and Zoos .....	5
	Zoos in the United States of America .....	8
	The Evolution of Zoo Design .....	9
	Zoo Education .....	12
	The Zoo Voice Today .....	13
	References .....	15
<b>3</b>	<b>Rationale for the Existence of Zoos</b> .....	19
	Education .....	21
	Conservation .....	23
	Recreation or Entertainment .....	26
	Facilities .....	27
	Research .....	28
	Culture and Society .....	30
	The Future .....	31
	References .....	32
<b>4</b>	<b>Visitors' Knowledge of Zoos</b> .....	37
	The Zoo Visitor and Their Reasons for Visiting the Zoo .....	38
	The Visitor's Perceptions of Nature .....	40
	The Importance of Mental Models .....	41
	Understandings People Have of Zoos .....	44
	References .....	48
<b>5</b>	<b>Exhibit Design</b> .....	53
	Exhibits .....	53
	Labels .....	60
	Animals as Exhibits and Topics of Conversation .....	62
	Experiential Space in Exhibits .....	65
	References .....	67

<b>6</b>	<b>Talking About Animals</b> .....	71
	Taxonomy and the Term Animal .....	72
	Identifying Animals.....	79
	Animal Behavior and Anatomy .....	84
	Attitudes, Emotional Connections, and Culture.....	85
	References.....	87
<b>7</b>	<b>Visitor Voice</b> .....	91
	Form, Function, and Categories of Conversations.....	92
	Discourse in the Exhibit .....	96
	Using Grounded Theory to Analyze Conversations.....	101
	Understanding Terminology .....	109
	References.....	113
<b>8</b>	<b>School and Family Groups' Conversations</b> .....	115
	Family Groups .....	117
	School Groups .....	123
	Talking Science .....	132
	References.....	134
<b>9</b>	<b>The Zoo Voice: Zoo Education and Learning</b> .....	137
	Why Visit Zoos? .....	137
	Prior Knowledge and Learning.....	139
	Zoo Education.....	144
	References.....	151
<b>10</b>	<b>Information Educators Need to Know About Zoo Field Trips (Useful Field Trip Information)</b> .....	155
	Analyzing Discourse.....	156
	Exhibit Learning Cycle .....	161
	Increasing Communication During the Interpretation Stage.....	168
	More Ideas .....	171
	Nature Tables .....	171
	Physical Science and Hands-On Activities Pre-visit.....	172
	Patterns of Animal Anatomy .....	173
	Hands-On Activities Pre-visit.....	174
	Zoo Kits.....	175
	DNA Fingerprinting .....	176
	References.....	177
<b>11</b>	<b>Zoo Field Trip Design</b> .....	179
	Rationale for Visiting the Zoo: Animals .....	180
	Rationale for Visiting the Zoo: Educational .....	181
	Learning During a Zoo Field Trip.....	183
	Characteristics of Successful Field Trips .....	186
	Cognitive: Pre-visit Activities .....	187
	Cognitive: During-Visit Activities .....	187

Cognitive: Post-visit Activities .....	190
Suggested Activities .....	191
Procedural: Facility Staff .....	193
Procedural: Advanced Organizers .....	195
Social: Student Groups .....	196
Social: Control of Visit and Learning .....	197
Teacher Training and Chaperone Preparation .....	198
References .....	199
<b>12 Conclusions</b> .....	<b>205</b>
<b>Index</b> .....	<b>211</b>