



Ines Arroyo-Quiroz

Developing countries and the implementation of CITES

**A Case Study of Mexico in the International
Reptile Skin Trade**

VDM

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Dr. Müller

Ines Arroyo-Quiroz

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Table of Contents

	Page
<i>Table of Contents</i>	<i>1</i>
<i>Plates</i>	5
<i>Figures</i>	6
<i>Tables</i>	8
<i>Acknowledgements</i>	10
<i>Explanatory Note</i>	10
 Chapter 1	11
1 General Introduction.....	11
1.1 Conservation and Wildlife Trade	11
1.2 The International Trade in Wildlife and its Regulation	16
1.2.1 The aims of CITES	17
1.2.2 The implementation of CITES.....	18
1.2.3 CITES in developing countries.....	21
1.2.4 CITES implementation at the national level	23
1.3 Mexico.....	25
1.3.1 CITES implementation	25
1.3.2 Megadiversity status	25
 Chapter 2	31
2 The International Trade in Wildlife involving Mexico: A Review	31
2.1 Introduction	31
2.2 International Trade in Wildlife Review.....	33
2.3 Imports of Non-native Species	34
2.4 Re-exports of Non-native Species	37
2.4.1 Legal re-exports	37
2.4.2 Illegal re-exports	38
2.5 Exports of Native Species	39
2.5.1 Legal exports.....	39
2.5.2 Illegal exports.....	43
2.6 Discussion	53
2.6.1 Non-native species	53
2.6.2 Native species	54
2.7 Aims of the Study.....	54
2.8 Outline	56

Chapter 3	57
3 Study Area and General Methods.....	57
3.1 Mexico.....	57
3.1.1 Geographical position	57
3.1.2 Physical characteristics	58
3.1.3 Geopolitical units	59
3.1.4 Development status.....	60
3.1.5 CITES implementation	62
3.1.6 Use of reptile skins.....	63
3.2 General Methodology of the Study	64
3.2.1 CITES implementation study.....	64
3.2.2 Case study of Mexican reptile skin trade	65
Chapter 4.....	71
4 CITES Implementation: The Mexican Experience.....	71
4.1 Introduction	71
4.2 Methodology	73
4.3 Results	75
4.3.1 Background environmental concerns.....	75
4.3.2 Emerging policies for wildlife: 1980s.....	79
4.3.3 The process of acceding to CITES: 1989 – 1991.....	86
4.3.4 Early lack of understanding of CITES: 1992 – 1996.....	89
4.3.5 More effective implementation of CITES: 1997 – 2001	94
4.4 Discussion	101
4.4.1 Emerging policies for wildlife: 1980s.....	101
4.4.2 The process of acceding to CITES: 1989 – 1991.....	102
4.4.3 Early lack of understanding of CITES: 1992 – 1996.....	103
4.4.4 More effective implementation of CITES: 1997 – 2001	104
Chapter 5	106
5 The Mexican Market for Reptile Skins: Manufacture and Distribution.....	106
5.1 Introduction	106
5.2 Methodology	109
5.3 Results	110
5.3.1 The leather and footwear sector	110
5.3.2 The use of reptile skins	112
5.3.3 The region of Leon, Guanajuato	118
5.3.4 Ciudad Juarez.....	125
5.4 Discussion	129
5.4.1 Mexico and its international trade in leather.....	129
5.4.2 Present status of knowledge.....	131

Chapter 6	134
6 The Use of Non-native Reptiles in the Mexican Leather Industry	134
6.1 Introduction	134
6.2 Methodology	137
6.2.1 CITES trade data	137
6.2.2 Correction factors for skin weights	138
6.2.3 Graphical presentation of data	139
6.3 Results	140
6.3.1 Total reptile skin imports 1980-2001	141
6.3.2 Reptile skin imports by individual species	143
6.3.3 Total reptile skin imports by year	152
6.3.4 Overall of reptile skins by year	155
6.3.5 Main countries of origin	157
6.3.6 Total reptile skin re-exports 1980-2001	160
6.3.7 Reptile skin re-exports by individual species	162
6.3.8 Total reptile skin re-exports by year	168
6.3.9 Balance between reptile skin imports and re-exports	171
6.4 Discussion	178
6.4.1 Imports	179
6.4.2 Re-exports	180
6.4.3 Trade balance	181
Chapter 7	182
7 The Use of Native Reptiles in the Mexican Leather Industry	182
7.1 Introduction	182
7.2 Methodology	183
7.2.1 CITES trade data	183
7.2.2 LEMIS trade data	185
7.2.3 Graphical presentation of data	185
7.3 Results	186
7.3.1 Exports based on CITES trade data 1980-2001	186
7.3.2 Exports based on LEMIS trade data 1995-1999	195
7.3.3 Comparison between CITES and LEMIS trade data	200
7.3.4 Contrast between reptile skin exports and re-exports	201
7.4 Discussion	208
7.4.1 Exports	208
7.4.2 Comparison between CITES and LEMIS trade data	209
7.4.3 Contrast between reptile skin exports and re-exports	209

Chapter 8	211
8 The Legal Mexican Market for Reptile Skins: Native Species	211
8.1 Introduction	211
8.2 Methodology	213
8.2.1 Data collection	213
8.2.2 Data analysis	214
8.3 Results	215
8.3.1 SUMA	215
8.3.2 Contrast between marine turtles and crocodiles	226
8.4 Discussion	235
8.4.1 SUMA	235
8.4.2 Contrast between marine turtles and crocodiles	239
Chapter 9	244
9 The Illegal Mexican Market for Reptile Skins: Native Species	244
9.1 Introduction	244
9.2 Methodology	245
9.2.1 Bibliographic searches	245
9.2.2 Semi-structured interviews	245
9.2.3 LEMIS trade data	246
9.3 Results	247
9.3.1 Species involved	247
9.3.2 Internal market	247
9.3.3 International market	262
9.4 Discussion	265
9.4.1 Status of knowledge	265
9.4.2 International market	266
Chapter 10	268
10 Research Findings and Conclusions	268
10.1 CITES Implementation	269
10.2 Manufacture and Distribution Study	269
10.3 The Use of Non-Native Reptiles	270
10.4 The Use of Native Reptiles	271
Chapter 11	273
11 Recommendations	273
11.1 Need for Market Studies	273
11.2 Encouraging Sustainable Use within CITES	275
11.3 Mexico's role in CITES	276
References	278

List of Plates, Figures and Tables

Plates

PLATE 5.1 IMPORT OF WATER SNAKE (*ACROCHORDUS JAVANICUS*) WHOLE SKINS 119

PLATE 5.2 IMPORTS OF COBRA (*NAJA SPUTATRIX*) WHOLE SKINS BY MEXICO 119

PLATE 6.1 IMPORTS OF FINISHED *VARANUS SALVATOR* WHOLE SKINS BY MEXICO 143

PLATE 6.2 IMPORTS OF FINISHED *CAIMAN* SPP. WHOLE SKINS BY MEXICO 146

PLATE 6.3 IMPORTS OF SALTED *CAIMAN* SPP. WHOLE SKINS BY MEXICO 146

PLATE 6.4 IMPORTS OF FINISHED *PYTHON RETICULATUS* SKINS BY MEXICO 148

PLATE 6.5 RE-EXPORTS OF *PYTHON RETICULATUS* SKIN PRODUCTS FROM MEXICO 166

PLATE 8.1 AQUA TERRARIUMS IN COCOMEX 219

PLATE 8.2 CONTROLLED ENVIRONMENT HOUSES IN COCOMEX 219

PLATE 8.3 HORN BACK CUT 220

PLATE 8.4 BELLY SKIN CUT 220

PLATE 8.5 *C. MORELETII* NEST AT COCOMEX 221

PLATE 8.6 *C. MORELETII* NEST AT COCOMEX 221

PLATE 8.7 *C. MORELETII* CONTROLLED ENVIRONMENT HOUSE AT COCOMEX 222

PLATE 8.8 FOLDED *C. MORELETII* SKINS AT COCOMEX 223

PLATE 9.1 SALTED RATTLESNAKE SKINS IN CHARCO CERCADO, SAN LUIS POTOSÍ 254

PLATE 9.2 DRYING RATTLESNAKE SKINS IN CHARCO CERCADO ROADWAY 255

PLATE 9.3 COWBOY BOOT INFORMAL MARKETS IN LEÓN, GUANAJUATO 260

PLATE 9.4 COWBOY BOOT PEDDLERS IN LEÓN, GUANAJUATO 261

PLATE 9.5 COWBOY BOOT PEDDLERS IN LEÓN, GUANAJUATO 261

Figures

FIGURE 1.1 SOME OF THE MAJOR EXPORTERS AND IMPORTERS OF WILDLIFE	13
FIGURE 1.2 BIOGEOGRAPHIC REGIONS OF MEXICO	26
FIGURE 1.3 MEGADIVERSE COUNTRIES	26
FIGURE 2.1 MEXICAN NET IMPORTS IN SELECTED SPECIES AND PRODUCTS OF CITES-LISTED WILDLIFE	34
FIGURE 2.2 MAIN COUNTRIES OF ORIGIN FOR MEXICAN IMPORTS OF REPTILE SKINS 1999..	36
FIGURE 2.3 MEXICAN SKIN IMPORTS OF CITES-LISTED WILDLIFE IN 1995	37
FIGURE 3.1 GEOGRAPHIC POSITION OF THE MEXICAN TERRITORY	57
FIGURE 3.2 MAIN PHYSICAL CHARACTERISTICS OF MEXICO	58
FIGURE 3.3 THE 32 STATES OF MEXICO	59
FIGURE 3.4 DATA FLOW DIAGRAM SYMBOL SETS	66
FIGURE 5.1 THE MARKET FOR REPTILE SKINS: MANUFACTURE AND DISTRIBUTION	113
FIGURE 5.2 THE LEATHER AND FOOTWEAR SECTOR OF LEON AND CIUDAD JUAREZ	114
FIGURE 5.3 THE MEXICAN MARKET FOR REPTILE SKINS: NON-NATIVE SPECIES	115
FIGURE 5.4 THE LEGAL MEXICAN MARKET FOR REPTILE SKINS: NATIVE SPECIES	116
FIGURE 5.5 THE ILLEGAL MEXICAN MARKET FOR REPTILE SKINS: NATIVE SPECIES.....	117
FIGURE 5.6 LEON: REPTILE SKIN MANUFACTURING AND DISTRIBUTION CENTRE	120
FIGURE 5.7 LEON: REPTILE SKIN MANUFACTURING AND DISTRIBUTION CENTRE	124
FIGURE 5.8 CIUDAD JUAREZ: THE CASE OF SMALL AND MEDIUM COWBOY BOOT INDUSTRIALISTS	128
FIGURE 6.1 IMPORTS OF REPTILE SKINS BY MEXICO 1980-2001.....	142
FIGURE 6.2 IMPORTS OF <i>VARANUS SALVATOR</i> BY MEXICO 1980-2001	144
FIGURE 6.3 IMPORTS OF <i>TUPINAMBIS</i> SPP. BY MEXICO 1980-2001	145
FIGURE 6.4 IMPORTS OF <i>CAIMAN</i> SPP. BY MEXICO 1980-2001	147
FIGURE 6.5 IMPORTS OF <i>PYTHON RETICULATUS</i> BY MEXICO 1980-2001	149
FIGURE 6.6 IMPORTS OF <i>VARANUS NILOTICUS</i> WHOLE SKINS BY MEXICO 1980-2001	150
FIGURE 6.7 IMPORTS OF <i>ALLIGATOR MISSISSIPPIENSIS</i> BY MEXICO 1980-2001	151
FIGURE 6.8 IMPORTS OF CROCODYLIDAE BY MEXICO 1980-2001.....	152
FIGURE 6.9 IMPORTS OF REPTILE SKINS BY MEXICO 1980-2001.....	153
FIGURE 6.10 IMPORTS OF REPTILE SKINS BY MEXICO 1980-2001.....	154
FIGURE 6.11 COMPARISON BETWEEN REPTILE OVERALL SKIN AND WHOLE SKIN IMPORTS BY MEXICO 1980-2001	156
FIGURE 6.12 COUNTRIES OF ORIGIN FOR IMPORTS OF REPTILE SKINS 1980-2001	158
FIGURE 6.13 RE-EXPORTS OF REPTILE SKINS AND PRODUCTS FROM MEXICO 1980-2001	161
FIGURE 6.14 RE-EXPORTS OF <i>VARANUS SALVATOR</i> FROM MEXICO 1980-2001	162
FIGURE 6.15 RE-EXPORTS OF <i>TUPINAMBIS</i> SPP. FROM MEXICO 1980-2001	163
FIGURE 6.16 RE-EXPORTS OF <i>CAIMAN</i> SPP. FROM MEXICO 1980-2001	164
FIGURE 6.17 RE-EXPORTS OF <i>PYTHON RETICULATUS</i> FROM MEXICO 1980-2001	165
FIGURE 6.18 RE-EXPORTS OF <i>ALLIGATOR MISSISSIPPIENSIS</i> FROM MEXICO 1980-2001	167
FIGURE 6.19 RE-EXPORTS OF CROCODYLIDAE SKIN PRODUCTS FROM MEXICO 1980-2001.	168
FIGURE 6.20 RE-EXPORTS OF REPTILE SKINS FROM MEXICO 1980-2001	169
FIGURE 6.21 RE-EXPORTS OF REPTILE SKINS FROM MEXICO 1980-2001	170
FIGURE 6.22 COMPARISON OF MEXICAN IMPORTS AND RE-EXPORTS OF <i>VARANUS SALVATOR</i> WHOLE SKINS 1980-2001	172
FIGURE 6.23 COMPARISON OF MEXICAN IMPORTS AND RE-EXPORTS OF <i>TUPINAMBIS</i> SPP. WHOLE SKINS 1980-2001.....	173
FIGURE 6.24 COMPARISON OF MEXICAN IMPORTS AND RE-EXPORTS OF <i>CAIMAN</i> SPP. SKINS 1980-2001	174
FIGURE 6.25 COMPARISON OF MEXICAN IMPORTS AND RE-EXPORTS OF <i>PYTHON RETICULATUS</i> WHOLE SKINS 1980-2001.....	175

FIGURE 6.26 COMPARISON OF MEXICAN IMPORTS AND RE-EXPORTS OF <i>ALLIGATOR MISSISSIPPIENSIS</i> SKINS 1980-2001.....	176
FIGURE 6.27 COMPARISON OF MEXICAN IMPORTS AND RE-EXPORTS OF CROCODYLIDAE SKINS 1980-2001	178
FIGURE 7.1 EXPORTS OF REPTILE SKINS FROM MEXICO 1980-2001	187
FIGURE 7.2 EXPORTS OF <i>CAIMAN</i> SPP. SKIN PRODUCTS FROM MEXICO 1980-2001	188
FIGURE 7.3 EXPORTS OF <i>CROCODYLUS</i> SPP. FROM MEXICO 1980-2001	188
FIGURE 7.4 EXPORTS OF <i>BOA CONSTRICTOR</i> SKIN PRODUCTS FROM MEXICO 1980-2001	189
FIGURE 7.5 EXPORTS OF <i>IGUANA IGUANA</i> SKIN PRODUCTS FROM MEXICO 1980-2001	190
FIGURE 7.6 EXPORTS OF <i>CHELONIA</i> SPP. FROM MEXICO 1980-2001	191
FIGURE 7.7 EXPORTS OF <i>LEPIDOCHELYS</i> SPP. SKIN PRODUCTS FROM MEXICO 1980-2001 ...	191
FIGURE 7.8 EXPORTS OF <i>CARETTA CARETTA</i> SKIN PRODUCTS FROM MEXICO 1980-2001	192
FIGURE 7.9 EXPORTS OF <i>ERETMOCHELYS IMBRICATA</i> SKIN PRODUCTS 1980-2001	192
FIGURE 7.10 EXPORTS OF REPTILE SKINS BY MEXICO 1980-2001	193
FIGURE 7.11 EXPORTS OF REPTILE SKINS BY MEXICO 1980-2001	194
FIGURE 7.12 EXPORTS OF REPTILE SKINS FROM MEXICO 1995-1999	197
FIGURE 7.13 EXPORTS OF <i>CAIMAN</i> SPP. FROM MEXICO TO THE US 1995-1999.....	198
FIGURE 7.14 EXPORTS OF <i>CROTALUS</i> SPP. FROM MEXICO TO THE US 1995-1999	198
FIGURE 7.15 EXPORTS OF <i>IGUANA</i> SPP. SKIN PRODUCTS TO THE US 1995-1999	199
FIGURE 7.16 EXPORTS OF <i>CROCODYLUS</i> SPP. SKIN PRODUCTS FROM MEXICO TO THE US 1995-1999	199
FIGURE 7.17 EXPORTS OF <i>BOA CONSTRICTOR</i> SKIN PRODUCTS FROM MEXICO TO THE US 1995-1999	200
FIGURE 7.18 COMPARISON OF MEXICAN REPTILE SKIN EXPORTS OF NATIVE <i>CAIMAN</i> SPP. AND RE-EXPORTS OF NON-NATIVE <i>CAIMAN</i> SPP. 1980-2001	203
FIGURE 7.19 COMPARISON OF EXPORTS OF NATIVE <i>CROCODYLUS</i> SPP. SKIN PRODUCTS AND RE-EXPORTS OF NON-NATIVE <i>CROCODYLUS</i> SPP. SKIN PRODUCTS 1980-2001	204
FIGURE 7.20 COMPARISON OF MEXICAN REPTILE SKIN EXPORTS OF NATIVE <i>IGUANA IGUANA</i> AND RE-EXPORTS OF NON-NATIVE <i>VARANUS SALVATOR</i> 1980-2001	205
FIGURE 7.21 COMPARISON OF MEXICAN REPTILE SKIN EXPORTS OF NATIVE <i>IGUANA IGUANA</i> AND RE-EXPORTS OF NON-NATIVE <i>TUPINAMBIS</i> SPP. 1980-2001	206
FIGURE 7.22 COMPARISON OF MEXICAN REPTILE SKIN EXPORTS OF NATIVE <i>BOA CONSTRICTOR</i> AND RE-EXPORTS OF <i>PYTHON RETICULATUS</i> 1980-2001	207
FIGURE 8.1 EXPORTS OF MARINE TURTLE SKIN PRODUCTS FROM MEXICO 1980-2001	230
FIGURE 8.2 EXPORTS OF MARINE TURTLE SKIN PRODUCTS FROM MEXICO 1980-2001	230
FIGURE 8.3 EXPORTS OF MARINE TURTLE WHOLE SKINS FROM MEXICO 1980-2001	231
FIGURE 8.4 MEXICAN EXPORTS OF REPTILE SKIN PRODUCTS 1996-1999	234
FIGURE 8.5 MEXICAN EXPORTS OF REPTILE SKIN PRODUCTS 1996-1999	234
FIGURE 9.1 ILLEGAL REPTILE SKIN TRADE: SOME CRITICAL AREAS	250
FIGURE 9.2 STATE OF OAXACA, MEXICO	252
FIGURE 9.3 CHIHUAHUAN DESERT ECOREGION	253
FIGURE 9.4 SINALOA, MEXICO.....	256
FIGURE 9.5 STATE OF TABASCO, MEXICO	257
FIGURE 9.6 SEIZURES ON WILDLIFE PRODUCTS IN TABASCO 1990-1992.....	258
FIGURE 9.7 REPTILE SKIN PRODUCTS FROM NATIVE MEXICAN SPECIES REFUSED CLEARANCE INTO THE US FROM 1996-1999.....	263
FIGURE 9.8 REPTILE SKIN PRODUCTS FROM NATIVE MEXICAN SPECIES REFUSED CLEARANCE INTO THE US FROM 1996-1999	264
FIGURE 9.9 MAIN PORTS OF ENTRY INTO THE US FOR EXPORTS OF REPTILE SKIN PRODUCTS FROM MEXICO REFUSED CLEARANCE 1996-1999.....	264
FIGURE 9.10 SOURCE OF REPTILE SKIN PRODUCTS EXPORTED BY MEXICO TO THE US WITH REFUSED CLEARANCE 1996-1999	265

Tables

TABLE 1.1 SIGNIFICANT SPECIES TRADED WORLDWIDE.....	15
TABLE 1.2 THE RANKING OF TWELVE COUNTRIES OF MEGADIVERSITY STATUS BASED ON SCORES OF SPECIES RICHNESS AND ENDEMISM.....	27
TABLE 1.3 COUNTRIES WITH THE GREATEST DIVERSITY OF SPECIES OF VASCULAR PLANTS AND TERRESTRIAL VERTEBRATES.....	27
TABLE 1.4 MAIN ECOLOGICAL PROBLEMS OF NATURAL RESOURCE USE IN MEXICO AND THE SOLUTIONS NEEDED	28
TABLE 2.1 MEXICAN IMPORTS OF CROCODILIAN SKINS BY SPECIES DURING 1993-1998	35
TABLE 2.2 US PLANT IMPORTS FROM MEXICO IN 1982	42
TABLE 2.3 EXPORTS OF MEXICAN ORCHIDS	43
TABLE 2.4 EXPORTS OF MEXICAN CACTI	43
TABLE 2.5 THE DISTRIBUTION OF THE WORLD'S SEA TURTLES IN MEXICO	46
TABLE 2.6 BIRD SPECIES WITH HIGHEST DEMAND IN ILLEGAL MARKET 1996	49
TABLE 3.1 DEMOGRAPHIC, SOCIAL, PHYSICAL, AND RESOURCE UTILIZATION PARAMETERS IN MEGADIVERSE COUNTRIES	61
TABLE 5.1 PRICES OF COWBOY BOOTS MADE WITH DIFFERENT REPTILE SKINS IN LEÓN, GUANAJUATO	121
TABLE 5.2 COMMERCIAL COUNCILS IN NORTH AMERICA.....	131
TABLE 6.1 MAJOR COUNTRIES EXPORTING/RE-EXPORTING* (>100 000 ITEMS/YEAR) PRODUCTS MANUFACTURED WITH REPTILE SKIN TO THE US DURING 1984-1990**	136
TABLE 6.2 AVERAGE WEIGHT PER SKIN FROM REPTILE SPECIES USED TO CONVERT SKIN WEIGHT (KG) INTO NUMBERS OF WHOLE SKINS.....	139
TABLE 6.3 CHECKLIST OF ANNUAL REPORT SUBMISSION BY THE TOP 11 EXPORTERS FROM 1991-2001 (AS OF AUGUST 2003).....	140
TABLE 6.4 MEXICAN IMPORTS OF REPTILE SKINS FROM NON-NATIVE SPECIES 1980-2001 ..	141
TABLE 6.5 MEXICAN IMPORTS OF REPTILE SKINS FROM NON-NATIVE SPECIES 1980-2001 ..	155
TABLE 6.6 MEXICAN RE-EXPORTS OF REPTILE SKINS AND PRODUCTS 1980-2001.....	160
TABLE 6.7 MEXICO'S TRADE BALANCE ON LEATHER, FOOTWEAR, AND MARROQUINERIA...	171
TABLE 6.8 MEXICAN TRADE BALANCE 1980-2001: IMPORTS VS. RE-EXPORTS OF <i>VARANUS SALVATOR</i>	172
TABLE 6.9 MEXICAN TRADE BALANCE 1980-2001: IMPORTS VS. RE-EXPORTS OF <i>TUPINAMBIS</i> SPP.	173
TABLE 6.10 MEXICAN TRADE BALANCE 1980-2001: IMPORTS VS. RE-EXPORTS OF <i>CAIMAN</i> SPP.....	174
TABLE 6.11 MEXICAN TRADE BALANCE 1980-2001: IMPORTS VS. RE-EXPORTS OF <i>PYTHON</i> <i>RETICULATUS</i>	175
TABLE 6.12 MEXICAN TRADE BALANCE 1980-2001: IMPORTS VS. RE-EXPORTS OF <i>ALLIGATOR</i> <i>MISSISSIPPIENSIS</i>	176
TABLE 6.13 MEXICAN TRADE BALANCE 1980-2001: IMPORTS VS. RE-EXPORTS OF CROCODYLIDAE	177
TABLE 7.1 PRICES OF REPTILES IN MEXICO	183
TABLE 7.2 MEXICAN EXPORTS: REPTILE WHOLE SKINS AND SKIN PRODUCTS FROM NATIVE SPECIES 1980-2001	186
TABLE 7.3 MEXICAN EXPORTS: REPTILE WHOLE SKINS AND SKIN PRODUCTS FROM NATIVE SPECIES 1995-1999.....	196
TABLE 7.4 MEXICAN EXPORTS TO THE US: REPTILE WHOLE SKINS FROM NATIVE SPECIES 1995-1999	200
TABLE 7.5 MEXICAN EXPORTS TO THE US: REPTILE SKIN PRODUCTS FROM NATIVE SPECIES 1995-1999	201

TABLE 7.6 MEXICAN EXPORTS AND RE-EXPORTS: REPTILE WHOLE SKINS FROM
NATIVE AND NON-NATIVE SPECIES 1980-2001202

TABLE 7.7 MEXICAN EXPORTS AND RE-EXPORTS: REPTILE SKIN PRODUCTS FROM
NATIVE AND NON-NATIVE SPECIES 1980-2001202

TABLE 8.1 UNITS FOR CONSERVATION, MANAGEMENT, AND SUSTAINABLE
UTILIZATION OF WILDLIFE (UMAS) THAT ARE LEGALLY AUTHORIZED TO
PRODUCE, SELL AND EXPORT REPTILE SKIN PRODUCTS AND LIVE ANIMALS217

TABLE 8.2 COCOMEX LIST OF PRICES (US\$) FOR
CROCODYLUS MORELETII SKINS IN 2001221

TABLE 8.3 EXPLOITATION OF MARINE TURTLES IN MEXICO.....229

TABLE 8.4 “EXPORTS” OF SEA TURTLE SKIN PRODUCTS BY MEXICO 1980-2001242

TABLE 9.1 ILLEGAL REPTILE SKIN TRADE248

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Chapter 1

1 General Introduction

This study focuses on the commercial trade in wildlife in Mexico. Wildlife trade has directly and indirectly affected the conservation of Mexican biodiversity at the species level. Mexico has also been an important entrepôt for wildlife trade to the United States, as well as a consumer and manufacturer of wildlife products. Equally, Mexico has been a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) since 1991. The study aims to compare Mexican policies on wildlife trade before and after it acceded to CITES, with special reference to policy, including administrative arrangements and legal instruments, and the implications for Mexico resulting from being a Party. A major rationale of this study is to explore the role of Mexico in international wildlife trade and any resulting success for wildlife conservation in Mexico as a result of being a Party to CITES. The study examines the reptile skin trade, both in non-native as well as native species, to determine the extent to which Mexico has, and is currently, implementing its policies towards CITES. I begin this document with two introductory chapters. Chapter 1 outlines the concerns of conservationists regarding wildlife trade, the measures taken internationally to regulate it, and the importance of measures that have to be implemented nationally by countries like Mexico. Chapter 1 also shows how important is Mexico as a centre of global biodiversity. Chapter 2 reviews what is known from already published sources about the extent of Mexico's involvement in the wildlife trade. These two chapters provide the basis for defining the aims and objectives of this study, which are outlined at the end of Chapter 2.

1.1 Conservation and Wildlife Trade

International wildlife trade comprises the import, export, or re-export of live animals and plants, as well as their parts and products, across national borders. When this trade is uncontrolled or mismanaged, it can seriously affect the survival of some of the Earth's most spectacular flora and fauna. Rhinos, sea turtles, macaws, and certain species of cacti are just some of the wildlife threatened by exploitation for international markets. Commercial hunters and collectors frequently kill or remove these and other species, with little or no regard for how many individuals the population can replace through natural reproduction (Fitzgerald, 1989). Resource economists have documented the financial benefits of harvesting the whole stock immediately and reinvesting the proceeds in an enterprise yielding a higher rate of return than that of a naturally growing stock (Clark, 1973, 1990). As a result, trade in wildlife and its products makes conservationists

understandably nervous (Caughley & Gunn, 1996; Milner-Gulland & Mace, 1998), while some authors suggest that no form of commercial trade in wildlife can ever be sustainable (Robinson & Bennett, 2000).

The excessive harvesting of wildlife species for commercial gain is one of the main threats to species diversity (Diamond, 1989; McNeely, A.J. *et al.* 1990; Mace & Balmford, 2000). History is replete with examples of wild animals exterminated for commercial exploitation (King, 1978; Robinson & Bennett, 2000). It is estimated that almost 40% of all vertebrate species that now face extinction do so because of hunting for trade (Fitzgerald, 1989). World trade in wild species is a large, complex, and lucrative business from which substantial earnings are made (Fuller *et al.*, 1987; Fitzgerald, 1989; Roe *et al.*, 2002). As an exploited species becomes more rare, or as the consumer demand grows, their value increases further (King, 1978). International trade in wildlife species was estimated to be worth at least \$5 billion annually in 1989. It included some 40,000 live primates, tusk ivory from at least 90,000 killed African elephants, at least 1 million live orchids, 4 million live birds, 10 million reptile skins, 15 million pelts from wild furbearers, over 350 million tropical fish, as well as other items as diverse as kangaroo leather and tortoiseshell trinkets (Fitzgerald, 1989). The minimum declared value for the wildlife trade worldwide now exceeds \$10 billion, excluding timber and fisheries products (Hemley, 1994; Dobson, 1998; Roe *et al.*, 2002).

Depending on which way particular species move in international commerce, nations can be classified as exporters, re-exporters or entrepôts, and importers. Twenty-five years ago, the greatest volume of international trade in wild species was unidirectional and moved from the less developed nations of Latin America, Africa, and Asia, which are primarily exporters or producers of wildlife, to the affluent industrialised nations of North America, the European Economic Community (now EU), and the Far East (Japan, China, Korea, Taiwan and Hong Kong), which are the major importers or consumers (Figure 1.1) (King, 1978; Fuller *et al.*, 1987; Cantú & Sánchez, 2000). Developing countries were an abundant source of skins, furs, meat and manufactured products, as well as live animals and plants. Their export trade was fuelled by the strong consumer demand in the industrialised nations (Hykle, 1988). It supplied their profitable fashion and food industries, as well as by users of rare animals and plants for medical/pharmaceutical research, exhibition or collection purposes (Sand, 1997).

Main Exporters

Argentina, Bolivia, Brazil, Central African Republic, China, Congo, Guyana, Honduras, Indonesia, **Mexico**, Paraguay, Peru, Philippines, Senegal, South Africa, South Korea, Sudan, Tanzania, Thailand, Turkey, USSR and Zaire

Main Importers

Canada, Korea, China, EEC, Hong Kong, Japan, Singapore, Taiwan and United States.

Figure 1.1 Some of the major exporters and importers of wildlife
(modified from Fitzgerald, 1989)

There is now increasing production through captive breeding in the United States and elsewhere. Nevertheless, despite increased home production, most exports from developing countries still go to Europe, US, Japan and, increasingly, to China. For example, exports to the US include: hyacinth macaws from Brazil; monitor lizards from Indonesia; butterflies from New Guinea; chimpanzees from Zaire; chameleons from Madagascar; and parrots from Mexico; among others. Exports to Europe include: orchids from Thailand; grey parrots from Ivory Coast; reptile skins from Argentina; cacti from Mexico; and ivory from Zimbabwe; among others. Exports to the Far East include: whale meat from Antarctic; rhino horn from South Africa; tiger bones and skins from India; and bear legs and gall bladders from Canada; among others (Cantú & Sánchez, 2000).

International trade also uses countries like re-export springboards. For example, in Central America, the traffic of species flows towards El Salvador and from that country to others; in South America, the main re-exporters are Argentina and Surinam; in North America, Mexico and Cuba; in Europe, Holland, Belgium and the Czech Republic; in Africa, Senegal and South Africa; in the Southeast of Asia, Indonesia and Thailand, and in the Far East, Taiwan and Hong Kong (Cantú & Sanchez, 2000).

Although there are no reliable estimates of the total volume or value of annual wildlife exports from Latin America, trade data from major wildlife importing nations suggest that approximately one third of the wildlife commodities on the world market come from this region (Fuller *et al.*, 1987). Millions of crocodile, turtle and snake skins, as well as other products, were exported from Latin America during the 20th century. Many species such as felids have been hunted nearly to extinction throughout their geographic range (Ceballos & Sanchez, 1994). In South America, Brazil, Colombia, and Peru are home to the fauna most sought by animal traffickers, while Argentina,

Paraguay and Uruguay typically serve as transit points or re-exporters for markets in Asia, Europe and the US (Epstein, 2000).

The world market for wildlife is particularly varied. International trade in wild species may be of live specimens, such as plants for display, and butterflies, fish, snakes, parrots for pets. It may also include dead specimens or derivatives, such as shells and insects for collections, ivory, rhino horns, skins, furs and bones for trade, and invertebrates for medicinal use (UNEP, 1995). Some species may be used for a variety of purposes. For example, sea horses (*Hippocampus* spp.) are globally exploited for use as medicines, aquarium fishes, curios, and even foods. The trade in live and dead seahorses is thought to encompass at least 32 countries and territories in all continents, and new seahorse fisheries are appearing all the time (Vincent, 1996). Many other examples abound. The market for swiftlet nests (*Collocalia* spp.) increased dramatically in the late 1980s in Hong Kong, Taiwan and Japan. In 1989, an absolute minimum of 159 tons of swiftlet nests entered international trade, which is equivalent to approximately 19.9 million nests, based on an average nest weight of 8g (Lau & Melville, 1994). Rhino horns are used in medicines and as dagger handles, and other rhino products such as skin and blood are also used (Leader-Williams, 1992). More than 120,000 cubic meters of big-leafed mahogany (*Swietenia macrophylla*) from Latin America enters international trade annually (Freese, 1998). The species is exported from at least 14 Latin American countries and imported by 15 countries, primarily in North America and Europe. In 1998, for example, the equivalent of an estimated 57,000 big-leafed mahogany trees was harvested and shipped to the US to supply a robust business in mahogany furniture (Robbins, 2000).

Although the world market for wildlife incorporates numerous and diverse species of flora and fauna, particular species predominate in the trade worldwide, including primates, live birds, and reptiles (Table 1.1).