

CONTENTS

Contributors	xvi
Preface	xix
Acknowledgements	xx
About the Companion Website	xxi

TOPICS	
Adenoviruses	1
Adrenal Gland Diseases	4
Aggression see Problem Behaviors: Aggression, Biting and Screaming	(374)
Air Sac Mites	8
Air Sac Rupture	10
Airborne toxicosis see Toxicosis (Airborne)	(434)
Algal Biotoxins	13
Amyloidosis	15
Anemia	17
Angel Wing	20
Angular Limb Deformity (Splay Leg)	22
Anorexia	24
Anticoagulant rodenticide toxicosis see Toxicosis (Anticoagulant Rodenticides)	(436)
Arboviruses see Eastern and Western Equine Encephalitis Viruses; Usutu Virus;	(145)
West Nile Virus	(478)
Arthritis see Joint Diseases	(241)
Ascites	27
Aspergillosis	30
Aspiration Pneumonia	33
Atherosclerosis	36
Atoxoplasmosis see Coccidiosis (Systemic)	(104)
Avian Influenza	40
Avian Vacuolar Myelinopathy	43
Avocado poisoning see Toxins (Ingested, Gastrointestinal)	(448)
Avulaviruses see Othoavulaviruses	(323)
Baylisascaris see Neural Larva Migrans	(300)
Beak Injuries	45
Beak Malocclusion (Lateral Beak Deformity)	48
Beak Malocclusion (Mandibular Prognathism)	51
Behavior see Problem Behaviors: Aggression, Biting and Screaming	(374)
Bite wounds see Wounds (Including Bite Wounds, Predator Attacks)	(481)



Client education handouts are available at www.wiley.com/go/Beaufrère/2e for you to download and use in practice

Bordetellosis	53
Bornaviral Disease (Aquatic Birds)	56
Bornaviral Disease (Psittaciformes)	58
Botulism	62
Brachial Plexus Injury	64
Brain tumors see Neoplasia (Neurological)	(305)
Bumblefoot see Pododermatitis	(358)
Bursa of Fabricius Diseases	66
Campylobacteriosis	70
Candidiasis	72
Capture Myopathy (Exertional Rhabdomyolysis)	74
Cardiac disease see Congestive Heart Failure, Myocardial Diseases	(114)
Carbamate toxicity see Toxicosis (Environmental, Pesticides)	(439)
Central nervous system tumors see Neoplasia (Neurological)	(290)
Cere and Skin Color Changes	77
Cervicocephalic diverticulum rupture see Air Sac Rupture	(10)
Chlamydiosis	79
Cholera see Pasteurellosis	(345)
Chronic Egg Laying	82
Circovirus (Psittacines)	85
Circoviruses (Non-Psittacine Birds)	87
Cloacal bursa diseases see Bursa of Fabricius Diseases	(66)
Cloacal Diseases	89
Cloacal Prolapse	92
Clostridiosis	95
Coagulopathies and Coagulation	98
Coccidiosis (Intestinal)	101
Coccidiosis (Systemic)	104
Coelomic Distension	107
Colibacillosis	111
Congestive Heart Failure	114
Conjunctivitis see Ocular Lesions	(313)
Constricted toe see Toe and Nails (Diseases of)	(426)
Coxiellosis	116
Crop Burn	118
Crop stasis see Ileus (Functional Gastrointestinal, Crop Stasis)	(233)
Cryptococciosis	120
Cryptosporidiosis	122
Degenerative joint disease see Joint Diseases	(241)
Dehydration [see also Hypotension]	125
Dermatitis	127
Diabetes Insipidus	130



Client education handouts are available at www.wiley.com/go/Beaufrère/2e for you to download and use in practice

Diabetes Mellitus and Hyperglycemia	132
Diarrhea	134
Discospondylitis	136
Dyslipidemia/Hyperlipidemia	139
Dyspnea see Respiratory Distress	(386)
Dystocia and Egg Binding	142
Eastern and Western Equine Encephalitis Viruses (EEV/WEEV)	145
Ectoparasites (Mites)	148
Ectoparasites (Ticks, Lice, Dipterans)	151
Egg Abnormalities	154
Egg binding see Dystocia and Egg Binding	(142)
Egg Yolk and Reproductive Coelomitis	158
Electrocution	160
Emaciation	162
Embryonic death/hatching failure see Egg Abnormalities	(154)
Endoparasites see Helminthiasis; Coccidiosis; Neural Larva Migrans	(300)
Enteritis and Gastritis	165
Enterococcal spondylitis see Discospondylitis	(136)
Exertional rhabdomyolysis see Capture Myopathy	(74)
Feather Cyst	168
Feather-Damaging and Self-Injurious Behavior	170
Feather Disorders	174
Flagellate Enteritis [see also Trichomoniasis]	177
Foreign Bodies (Gastrointestinal)	180
Foreign Bodies (respiratory) see Tracheal Diseases	(457)
Fractures	183
Frostbite see Hypothermia	(231)
Gastrointestinal foreign bodies see Foreign Bodies (Gastrointestinal)	(180)
Gastritis see Enteritis and Gastritis	(165)
Giardiasis see Flagellate Enteritis	(177)
Goiter see Thyroid Diseases	(424)
Gout see Renal Disease and Hyperuricemia	(380)
Head trauma see Neurologic Trauma	(305)
Heart failure see Congestive Heart Failure	(114)
Heat Stroke	186
Heavy metal toxicity see Toxicosis (Heavy Metals)	(443)
Helminthiasis (Body Cavity and Cardiovascular)	188
Helminthiasis (Gastrointestinal)	190
Helminthiasis (Neurological) see Neural Larva Migrans	(300)
Helminthiasis (Respiratory)	193
Hemochromatosis see Iron Storage Disease	(239)
Hemoparasites	196



Client education handouts are available at www.wiley.com/go/Beaufrère/2e for you to download and use in practice

Hemorrhage	199
Hepatic Lipidosis	203
Hepatitis see Liver Disease	(250)
Hernia/Pseudo hernia	206
Herpesvirus (chicken) see Marek's Disease;	(261)
Respiratory Infections of Backyard Chickens	(389)
Herpesvirus (Columbid Herpesvirus 1 in Pigeons and Raptors)	208
Herpesvirus (Duck Viral Enteritis)	210
Herpesvirus (Passerine Birds)	213
Herpesvirus (Psittacid Herpesviruses)	215
Histomoniasis	218
Horner Syndrome	220
Hypercholesterolemia see Dyslipidemia	(139)
Hyperglycemia see Diabetes Mellitus and Hyperglycemia	(132)
Hyperlipidemia see Dyslipidemia/Hyperlipidemia	(139)
Hyperparathyroidism see Metabolic Bone Disease	(263)
Hyperthermia see Heat Stroke	(186)
Hyperuricemia	222
Hypocalcemia (and Hypomagnesemia)	225
Hypotension and Hypovolemia	228
Hypothermia	231
Hypothyroidism see Thyroid Diseases	(424)
Hypovitaminosis A see Nutritional Imbalances	(308)
Ileus (Functional Gastrointestinal, Crop Stasis)	233
Infectious bronchitis see Respiratory Infections of Backyard Chickens	(389)
Infectious laryngotracheitis see Respiratory Infections of Backyard Chickens	(389)
Infertility	236
Ingested toxicosis see Toxicosis (Ingested)	(448)
Ingluvial hypomotility see Ileus (Functional Gastrointestinal, Crop Stasis)	(233)
Iron Storage Disease	239
Joint Diseases	241
Knemidocoptic mites see Ectoparasites (Mites)	(148)
Lameness	243
Lead see Toxicosis (Heavy Metals)	(443)
Leukemia see Neoplasia	(284)
Leukocytosis	247
Leukosis virus (avian) see Retroviruses in Galliformes	(393)
Lice see Ectoparasites (Ticks, Lice, Dipterans)	(151)
Lipoma see Neoplasia (Integument)	(284)
Liver Disease	250
Lung Diseases [see also Pneumonia; Toxicosis (Airborne and Respiratory Distress)]	253
Luxations	256
Lymphosarcoma see Neoplasia (Lymphoproliferative)	(286)



Client education handouts are available at www.wiley.com/go/Beaufrère/2e for you to download and use in practice

<i>Macrorhabdus Ornithogaster</i>	259
Malaria see Hemoparasites	(196)
Malnutrition see Emaciation	(162)
Mandibular prognathism see Beak Malocclusion (Mandibular Prognathism)	(51)
Marek's Disease	261
Metabolic Bone Disease	263
Microsporidiosis/Encephalitozoon	266
Mites see Ectoparasites (Mites)	(148)
Mycobacteriosis	268
Mycoplasmosis	271
Mycotoxicosis	274
Myiasis	277
Myocardial Diseases	279
Nails (diseases of) see Toes and Nails (Diseases of)	(426)
Neoplasia (Gastrointestinal and Hepatic)	282
Neoplasia (Integument)	284
Neoplasia (Lymphoproliferative)	286
Neoplasia (Neurologic)	290
Neoplasia (Renal)	293
Neoplasia (Reproductive)	295
Neoplasia (Respiratory)	298
Neural Larva Migrans	300
Neurologic (Non-Traumatic Diseases)	302
Neurologic (Trauma)	305
Newcastle disease see Orthoavulaviruses	(323)
Nutritional Imbalances [see also Hypovitaminosis A]	308
Obesity	311
Ocular Lesions	313
Oil Exposure	316
Oral Plaques	320
Organophosphate toxicity see Toxicosis (Environmental, Pesticides)	(439)
Orthoavulaviruses	323
Osteomyelosclerosis see Polyostotic Hyperostosis	(367)
Otitis	327
Ovarian Diseases	330
Overgrown beak see Beak Malocclusion	(48)
Oviductal Diseases	334
Pacheco's disease see Herpesviruses (Psittacids)	(215)
Pain	337
Pancreatic Diseases	340
Papillomatosis (Cutaneous)	343
Papillomatosis, internal see Herpesvirus	(208)
Paramyxoviruses see Orthoavulaviruses	(323)



Client education handouts are available at www.wiley.com/go/Beaufrère/2e for you to download and use in practice

Parasites (external) see Ectoparasites	(148)
Parasites (internal) see Helminthiasis; Coccidiosis; Neural Larva Migrans	(300)
Pasteurellosis	345
Patagium Diseases	347
Perosis/Slipped Tendon	349
Phallus Prolapse	351
Pituitary tumors see Neoplasia (Neurological)	(290)
Plant toxins see Toxicosis (Ingested, Gastrointestinal)	(448)
Pneumonia	354
Pododermatitis	358
Polydipsia	362
Polyfolliculitis see Dermatitis	(127)
Polyomavirus	365
Polyostotic Hyperostosis	367
Polyuria	369
Poxvirus	371
Predator attack see Wounds (Including Bite Wounds, Predator Attacks)	(481)
Problem Behaviors: Aggression, Biting and Screaming	374
Prolapses (see Cloacal Prolapse)	(92)
Proventricular Dilatation Disease (see Bornaviral Diseases)	(56)
Proventricular diseases (see Enteritis and Gastritis)	(165)
Psittacine beak and feather disease (see Circoviruses)	(85)
PTFE toxicosis see Toxicosis (Environmental/Pesticides)	(439)
Regurgitation and Vomiting	378
Renal Diseases	380
Reovirus	384
Respiratory Distress	386
Respiratory foreign bodies see Tracheal Diseases	(457)
Respiratory Infections of Backyard Chickens [see also Mycoplasmosis]	389
Retroviruses in Galliformes	393
Rhinitis and Sinusitis	395
Rotavirus	398
Salmonellosis	400
Salpingitis see Oviductal Diseases	(334)
Sarcocystosis	402
Scissors beak see Beak Malocclusion (Lateral Beak Deformity)	(48)
Seizures	405
Self-injurious behavior see Feather-Damaging and Self-Injurious Behavior	(170)
Sepsis	408
Sick-Bird Syndrome	411
Smoke inhalation injury see Toxicosis (Airborne)	(434)
Spinal trauma see Neurologic Trauma	(305)
Spirochete Infection	413



Client education handouts are available at www.wiley.com/go/Beaufreire/2e for you to download and use in practice

Spironucleus see Flagellate (Intestinal)	(177)
Splay Leg see Angular Limb Deformities	(22)
Spleen (Diseases of)	415
Squamous Cell Carcinoma see Neoplasia (Integument)	(284)
Squamous metaplasia see Hypovitaminosis A	(308)
Stroke see Atherosclerosis	(36)
Syringeal disease see Tracheal and Syringeal Diseases	(457)
Tendinitis and Tenosynovitis	418
Thymus (Diseases of)	422
Thyroid Diseases	424
Toe and Nail Diseases	426
Togaviruses see Eastern and Western Equine Encephalitis Viruses	(145)
Tongue Diseases	431
Toxicosis (Airborne)	434
Toxicosis (Anticoagulant Rodenticide)	436
Toxicosis (Environmental, Pesticides)	439
Toxicicosis (Heavy Metals)	443
Toxicosis (iatrogenic)	445
Toxicosis (Ingested, Gastrointestinal)	448
Toxicosis (Vitamin D)	452
Toxoplasmosis	454
Tracheal and Syringeal Diseases	457
Trauma [see also Neurologic Trauma]	461
Trichomoniasis	465
Tumors see Neoplasia	(284)
Undigested Food in Droppings	468
Urate and Fecal Discoloration	471
Uropygial Gland Disease	474
Usutu Virus	476
Viral diseases see individual named viral diseases	(56)
Vitamin D toxicosis see Toxicosis (Vitamin D)	(452)
West Nile Virus	478
Wing droop see Brachial Plexus Avulsion; Fractures; Luxations	(64)
Wounds (Including Bite Wounds, Predator Attacks)	481
Xanthoma/Xanthogranulomatosis	484
Yersiniosis	486
Yolk Sac Retention and Infection	488
Young pigeon syndrome see Circovirus	(85)
Zinc see Toxicosis (Heavy Metals)	(443)
Appendix I: Common Dosages for Birds	490
Appendix II: Avian Hematology Reference Values	497
Appendix III: Laboratory Testing (USA)	499
Appendix IV: Viral Diseases of Concern	504



Client education handouts are available at www.wiley.com/go/Beaufrère/2e for you to download and use in practice

Appendix V: Selected Zoonotic Diseases of Concern and Personal Protection	511
Appendix VI: Common Avian Toxins and Their Clinical Signs	513
Appendix VII: Avian Taxonomy	516
Appendix VIII: Clinical Algorithms	523
Algorithm 1: Sick-Bird Syndrome	523
Algorithm 2: Diarrhea	524
Algorithm 3: Regurgitation/Vomiting	525
Algorithm 4: Respiratory Distress	526
Algorithm 5: Coelomic Distension	527
Algorithm 6: Egg Binding	528
Algorithm 7: Anemia	529
Algorithm 8: Oropharyngeal Lesions	530
Algorithm 9: Neurologic Signs	531
Algorithm 10: Polydipsia	532
Algorithm 11: Polyuria	533
Algorithm 12: Feather Loss	534
Algorithm 13: Lameness	535
Algorithm 14: Hyperuricemia	536
Algorithm 15: Hepatopathy	537
Algorithm 16: Wing Droop	538
Algorithm 17: Respiratory Distress in Chickens	539
Algorithm 18: Cloacal Prolapse	540
Index	541

ONLINE MATERIALS

Procedures

- Air Sac Cannula
- Beak and Nail Trimming
- Blood Transfusion
- Bone Marrow Aspiration
- Choanal Swab
- Cloacal Swab
- Coelomocentesis
- Conjunctival Swab
- Deslorelin Implant
- Elizabethan Collar
- Fecal Wet Mount and Gram Stain
- Figure of Eight Bandage
- Handling and Restraint
- Indirect Blood Pressure Monitoring
- Ingluvial gavage



Client education handouts are available at www.wiley.com/go/Beaufre/2e for you to download and use in practice

Intramuscular Injection
Intraosseous Catheter
Intravenous Catheter
Microchip Placement
Nasal Flush
Oral medications
Sinus Aspiration
Subcutaneous injection
Tracheal Swab or Wash
Venipuncture
Ventplasty
Wing Trimming

Client Education Handouts

Airborne Toxins
Angel Wing
Arthritis
Aspergillosis
Avocado/Plant Toxins
Bornaviral Disease (Psittaciformes)
Chlamydiosis
Chronic Egg Laying
Cloacal Disease
Cystic Ovarian Disease
Feather-Damaging Behavior
Heavy-Metal Toxicity
Hypocalcemia and Hypomagnesemia
Liver Disease
Macrorhabdosis
Nutritional Deficiencies
Ovarian Neoplasia
Overgrown Beak and Nails
Obesity
Oophoritis
Pododermatitis (Bumblefoot)
Polyomavirus in Psittacines
Regurgitation and Vomiting
Renal Disease
Rhinitis and Sinusitis
Sick-Bird Syndrome
Ten Things Your Parrot Wants You to Know about Behavior
Trauma



Client education handouts are available at www.wiley.com/go/Beaufrere/2e for you to download and use in practice