

## Contents

<b>List of Contributors</b>	<i>xi</i>
<b>Preface</b>	<i>xiii</i>
<b>Acknowledgments</b>	<i>xv</i>
<b>About the Companion Website</b>	<i>xvii</i>

### Section 1 Orthopedic Examination 1

<b>1</b>	<b>General Examination</b>	<i>3</i>
1.1	General Strategy	<i>3</i>
1.2	Chief Complaint and History	<i>6</i>
1.3	Rule-Outs: Systemic (Medical) Conditions and Neurologic Disorders	<i>7</i>
1.4	Differential Diagnosis	<i>8</i>
1.5	Orthopedic Examination Form	<i>11</i>
<b>2</b>	<b>Orthopedic Observation</b>	<i>17</i>
2.1	Distant Observation	<i>17</i>
2.2	Sit Observation	<i>31</i>
2.3	Gait Observation	<i>34</i>
<b>3</b>	<b>Orthopedic Palpation 1: Standing Examination</b>	<i>38</i>
3.1	General and Neurologic Examination	<i>38</i>
3.2	Thoracic Limb	<i>40</i>
3.3	Pelvic Limb	<i>43</i>
<b>4</b>	<b>Orthopedic Palpation 2: Recumbent Examination</b>	<i>47</i>
4.1	Thoracic Limb	<i>47</i>
4.2	Pelvic Limb	<i>54</i>

### Section 2 Common Orthopedic Conditions 63

<b>5</b>	<b>Thoracic Limb Conditions</b>	<i>65</i>
5.1	Common General Conditions	<i>65</i>
5.2	Shoulder Region: Growing Dogs	<i>69</i>

- 5.3 Shoulder Region: Mature Dogs 72
- 5.4 Elbow Region and Antebrachium: Growing Dogs 78
- 5.5 Elbow Region: Mature Dogs 89
- 5.6 Carpal Region and Distal Limb: Growing Dogs 92
- 5.7 Carpal Region and Distal Limb: Mature Dogs 95

## **6 Pelvic Limb Conditions 101**

- 6.1 Common General Conditions 101
- 6.2 Hip Region: Growing Dogs 102
- 6.3 Hip (and Pelvic) Region: Mature Dogs 107
- 6.4 Stifle Region: Growing Dogs 111
- 6.5 Stifle Region: Mature Dogs 117
- 6.6 Tarsal Region and Distal Limb: Growing Dogs 122
- 6.7 Tarsal Region and Distal Limb: Mature Dogs 124

## **Section 3 Case Discussion 127**

### **7 Congenital/Developmental Conditions and Deformities 129**

- 7.1 Congenital Elbow (Radial) Luxation 129
- 7.2 Congenital Elbow (Ulnar) Luxation 134
- 7.3 Angular Limb Deformity/Elbow Subluxation 138
- 7.4 Carpal Laxity Syndrome 148
- 7.5 Genu Recurvatum (Congenital Stifle Hyperextension) 150
- 7.6 Tibial Deformity (Pes Varus) 152
- 7.7 Hypertrophic Osteodystrophy 153

### **8 Thoracic Limb Lameness in Young Dogs 155**

- 8.1 Elbow Dysplasia (Medial Coronoid Disease) 155
- 8.2 Shoulder Osteochondrosis Dissecans 160
- 8.3 Physeal Fractures, Avulsion Fractures 162

### **9 Thoracic Limb Lameness in Mature Dogs 164**

- 9.1 Elbow Osteoarthritis 164
- 9.2 Shoulder Tendinopathy 166
- 9.3 Shoulder Luxation in Small Dogs 168
- 9.4 Carpal Hyperextension 171
- 9.5 Neoplasia 173
- 9.6 Immune-Mediated Poly-arthropathy 177

### **10 Pelvic Limb Lameness in Young Dogs 179**

- 10.1 Medial Patellar Luxation 179
- 10.2 Lateral Patellar Luxation 189
- 10.3 Hip Dysplasia 191

10.4	Femoral Head Necrosis (Legg–Calve–Perthes Disease) and Related Conditions	193
10.5	Tarsal/Stifle Osteochondritis Dissecans	198
10.6	Physeal Fractures, Avulsion Fractures	202
<b>11</b>	<b>Pelvic Limb Lameness in Mature Dogs</b>	<b>205</b>
11.1	Cruciate Disease	205
11.2	Cruciate Disease and Medial Patellar Luxation	213
11.3	Hip Osteoarthritis	216
11.4	Lumbosacral Disease	218
11.5	Hip Luxation	219
11.6	Calcaneal Tendon Pathology	221
11.7	Neoplasia	223
11.8	Immune-Mediated Poly-arthropathy, Septic Arthritis	225
<b>12</b>	<b>Multiple Limb Lameness</b>	<b>229</b>
12.1	Poly-arthropathy	229
12.2	Bilateral Stifle Osteochondritis Dissecans and Cruciate Disease	232
12.3	Bilateral Hip Luxation, Cruciate Disease, and Medial Patellar Luxation	235
12.4	Bilateral Hip Osteoarthritis and Cruciate Disease	237
	<b>Index</b>	<b>243</b>