

CONTENTS

Preface ix

1	Daphne	1
2	Childhood: A Kaleidoscope of Memories	4
3	The Gift of Whitgift	21
4	Marking Time in National Service	36
5	Becoming Serious	41
6	Imprinting on Wild America	52
7	An Island Problem	62
8	Postdoctoral Interlude at Yale	80
9	McGill and Montreal	85
10	Of Mice and Birds	98
11	Evolution by Natural Selection	112
12	Michigan	127
13	From Michigan to Princeton	135
14	The Drama of El Niño	149
15	Uno Becomes Duo	160

viii CONTENTS

16	In Search of DNA	170
17	First Experiences of Asia	182
18	New Discoveries on Daphne	191
19	Retirement	202
20	Celebrating Charles Darwin	210
21	End of Field Research on Daphne	227
22	An Epicurean Life	241
23	Hobbling in Hawaii and Becoming an American	254
24	Guests at the Top End	265
25	Begin with an Operation, End with a Medal	274
26	Finch Genes and a Return to Galápagos	286
27	In Praise of Old Nassau	294
28	And So to Lockdown	301
	Epilogue	306

Acknowledgments 307

Appendix 309

References 313

Subject Index 317

Bird Index 343

1

Daphne

November 23, 1905 Sailed for Daphne Island in the morning . . . the mate lost the skiff so we had to return to the ship and sail after it; we got everything straightened out about 1:30 after capsizing the two other boats in a series of maneuvers and landed again at about 2 o'clock.

*RACE WITH EXTINCTION: HERPETOLOGICAL FIELD
NOTES OF J. R. SLEVIN'S JOURNEY TO THE GALÁPAGOS,
1905-1906 (FRITTS AND FRITTS 1982)*

FEBRUARY 5, 1998 There is no anchorage; the volcanic rocks slope steeply into the sea and rapidly disappear (Fig. 1.1). Nor is there a beach. We land on a barnacle-covered wave-cut platform, very roughly flat and measuring little more than one yard by two. A volunteer helper stands to receive goods from a crew member of the *Pirata* at the front of a *panga* (Zodiac) as it rises with the surf and twists with the current. Another volunteer, a marine biology student from Guayaquil, Ecuador, is halfway up a pockmarked, eight-foot-tall vertical cliff, acting as intermediary between his companion at the landing (or me) and Rosemary at the top. It's a crucial position in the chain; the person has to be strong, fit, and flexible. Men are not the only ones to have occupied the position, but Rosemary and I are now too old to do the whole exercise safely by ourselves; that is why we have assistants.



FIGURE 1.1. Daphne Major landing. **Upper left:** The wave-cut, barnacle-covered platform at low tide; arrows indicate “step.” **Lower left:** Peter Boag and Laurene Ratcliffe leaving Daphne, 1976. **Right:** Departure when sea is calm (photo M. Wikelski). (Upper left and right from Grant and Grant 2014, Fig. 1.3.)

Seabirds—gulls, boobies, and tropicbirds—fill the air with their whiteness and cries. There is movement everywhere. I am perched on an adjacent rock to help, as an additional receiver, and all goes well until I drop my guard, and the swell gently lifts me up and off my perch without any intention of putting me back there again. It is, after all, an El Niño year, and a surf several feet high is to be expected. It is the first time this has happened to me and is destined to be the only time.

By the time we have completed the unloading, there will be thirty or forty green plastic five-gallon bottles of water (*chimbuzos*) at the top of the cliff, to be shifted to shady shelters and cavelets for protection against the sun. The arid little island gives us neither food nor water. The *chimbuzos* will be accompanied by six to ten white metal waterproof boxes with our food for a month: rice, cans of tuna, packets of dried

soup, cookies, sugar, coffee, and powdered milk that is designed for infants elsewhere. A few loaves of bread, a stick of bananas, and a few potatoes will be the luxury fresh foods for the first few days. All will need to be moved to caves for shelter from the sun.

We put up a shade over an open cave that faces the sea and the island from which we have come, Santa Cruz. This will be the kitchen. The tent—the bedroom—will go up later on a small patch of semi-flat ground next to a large spread of prickly pear cactus perched at the top of a steep slope to the sea. We are excited to be back for another field season, our twenty-sixth, to study Darwin's finches that we know so well, but we are also very busy setting up camp under the equatorial sun, and I have no time to do anything other than register the fact that *Geospiza scandens* 10105, a Common Cactus Finch in his fifteenth year, is singing on his cactus bush, as usual.

SUBJECT INDEX

- Abbott, Ian and Lynette, 105–9, 231
 Aboriginal, 268
 Abyssinian, 134
 Abzhanov, Arhat, 196, 198, 205
 Accademia Nazionale dei Lincei, 243
 Achenbach, Joel, 226
 adaptive radiation, 112, 116, 152, 217, 232, 257,
 270, 310
 adder, 9
 Afghanistan, 101, 103
 Africa, 18, 44–5, 62, 83, 165, 245
 Akranes, Iceland, 276
 Akureyri, Iceland, 34
 Alabama, 58–59
 Albaicín, Granada, 40, 249
 Albania, 104
 Alberta, badlands, 208
 Alcázar, Spain, 249
 Alcedo, Isabela Island, 120–21, 177–79
 Alexander the Great, 102
 Alexander, Dick, 136
 Alexandrino, Paolo, 248
 Alfonso X of Castile, 250
 Algerians, 245
 Alhambra, Granada, 40, 249
 Alice Springs, Australia, 270–71
 alligator, 59, 258
 Alpilles, France, 246
Alyscamps, 247
 Alves, Paolo, 248
 ALX1, genetic transcription factor, 287
 Amadio, Davide, 243
 Amazon, Amazonian, 35, 236, 239
 ambassador; British, 11, 223, 291; U.S., 223
 American Academy of Arts and Sciences, 167
 American Institute of Biological Sciences, 183
 American Museum of Natural History. *See*
 museums
 American Ornithologists' Union, 166, 208
 American Society of Naturalists, 167, 169
 Ames, Peter, 81
 amphitheater, 245
 Amsterdam, 100
 Anaconda. *See* snakes
 anaphylactic shock, 127
 Anderson, Andy and Doreen, 55
 Andersson, Leif, 192, 244, 286, 30
 Anbangbang Billabong, Australia, 269
 Angermeyer, Karl, 260
 Anhinga Trail, Everglades, 59, 259
 Animal Behaviour Research Group, Oxford,
 100, 137
 Animal Ecology Research Group, Oxford,
 100, 137
 Anjali (Rio), my granddaughter, 162, 257
 Ann Arbor, Michigan, 37, 114, 127–31,
 134–36, 38, 143, 148
 anniversary, anniversaries, 94, 166, 183, 188,
 204, 209–10, 260, 274, 301; Darwin,
 209–10; birthday, 211, 302; wedding, 47,
 67, 70, 161–62, 185, 274, 301
annus mirabilis, 219, 242, 257
Anolis lizards, 176
 Antarctica, 272
 antelope, 103, 166
 anthropology, 45, 140, 244

- ants, 285
- Appalachian Trail, 162
- Aquamarine shampoo, 199
- Arab, 249–50
- Aragon, Spain, 250
- archaeological site, 241, 244
- archipelago, 64, 109, 123–24, 179, 180, 191–92, 228, 232, 244, 288
- Archivo General de Indias, 249
- Arctic Char, 274
- arena, 80, 183, 245, 271
- Argentina, 297
- Arizona, 55, 94
- Arles, France, 245–47
- Arlington, Virginia, 183
- Armagnac, 132
- Armand, Louis, 248
- Arnason, Einar and Katrin, 216, 276
- Arnhem Highway, 269
- Arnside, Cumbria (Westmorland), U.K., 66, 67, 92, 113, 139, 160, 263
- Aromas de Montserrat, 39
- Arran, Scotland, 43
- Arruza, Carlos, matador, 39
- Ashmole, Philip, 81
- Ashnola River, British Columbia, 66, 209
- ashram, 257, 294
- Asia, 13, 182, 188, 208
- Asilomar, California, 167
- Askja, Iceland, 25
- asses, 103
- Audubon Court, New Haven, 257
- Audubon Society, 58
- Augustus, Roman emperor, 245
- aunts and uncles: Lil, and Uncle Stan, 6; Vi, and Uncle George, 4, 17, 51, 87; Win, and Alan, 14; Vic Thompson, 12, 14, 18, 20; Win, and Bill Lorimer, 20
- Austin, Texas, 255
- Australia, 15, 87, 93, 105, 265–73, 301–02
- Australian Broadcasting Corporation, 174, 266
- Aven Armand (cavern), France, 247
- avian pox, 229
- avocado, wild, 298
- awards, received: Alexander von Humboldt, 165, E. O. Wilson Naturalist, 167
- azaleas, 161
- Aztec, 82, 187–88, 285
- backcross, 152, 154, 179, 289, 292
- bacteria, 233, 304
- Badger, European, 138, 164
- Bahía Borrero, Galápagos, 107–8
- Baillargeon, H  lene, 95
- Baird, Pat, 89
- Baiyer River Sanctuary, New Guinea, 93
- Baker, Bill, 61
- balsa log, 119
- Bamu Game Reserve, Iran, 103
- banding (ringing) of birds, 107, 116, 120–21, 123, 156, 197, 229
- banding cave, 229
- bands on snail shells, 50
- Banff, Alberta, 65, 91, 208
- Barbados, 205
- Barcelona, Spain, 39, 207, 214
- barnacles, 98, 173
- Barnes, on the River Thames, 279
- baroness, 260
- baroque musical instruments, 258
- Barramundi, 268
- Barrett, Spencer, 275
- Barro Colorado Island, Panama, 176
- bas-reliefs, 102
- Bascompte, Jordi, 249
- basilica, 215
- Bates, Henry Walter, 88
- Bateson, Pat, 43, 50, 132, 138, 216
- Bats. *See* flying fox; Mexican Free-tailed Bats
- Batty Barton, 139
- bazaar, spices and fruits, 103, 140
- BBC News, 237, 246, 270, 304
- BCO2 gene, 286
- Beagle*, 283; *II*, 124; *III*, 179, 181

SUBJECT INDEX 319

- bears, 32, 93, 132, 139
- Beckenham, Kent, U.K., 20, 23
- Beckett, Thomas, 37
- Beerman, Hans, 81
- Beethoven, 280
- behavioral (evolutionary) biology, 101, 128, 204, 260–61, 299
- Beijing, China, 185, 285
- Belgium, 128
- Bellairs Research Institute, McGill University, 205
- benefaction, alumni, 258
- Berg, Scott, 296
- Bergen, Norway, 48, 276
- Berger, Dan, immigration lawyer, 261
- Berkeley, California, 54
- Berlin, New Jersey, 161
- Berlin-Brandenberg Akademie der Wissenschaften, 189
- Bermuda, 197
- Bernardi, Giorgio, 244
- bettongs, 271
- bilbies, 271
- biochemistry, 44, 49
- biographies, fellows of the Royal Society of London, 205
- biology, 1, 23–26, 28, 30, 31, 43–45, 49, 65, 81–82, 94, 102, 129, 131, 133, 135, 147–48, 176, 189, 203, 213, 234, 244, 250, 254, 255, 261, 275–76, 279, 299
- Biology Leadership Community conference, 254
- birch trees, 48, 131, 133, 216, 276
- bird community, 79, 117, 142, 151, 265
- bird-of-paradise, 93, 267
- bird society, 30
- birding, bird-watching, 18, 31, 40, 54, 58, 83, 163, 261, 266, 269, 297–98, 302
- Birmingham, UK, 164
- bladderwort, 147
- Blake, John, 235
- Blanton, Chantal, 172
- blister beetle, sex-stimulant, 157
- Blitz, London, 7
- blood samples for DNA analysis, 144, 153, 155, 156, 170, 175, 178, 214, 229, 287, 290
- Blue Mosque, 103
- boa constrictor, 25
- Boadicea, 213
- Boag, Peter, 2, 113, 228, 275
- boar, 269
- boats, 1, 48, 71, 73, 108, 117, 119, 120, 122, 124–25, 172, 174, 178, 181, 245, 261, 278, 292, 304
- body size, 106, 113, 115, 123, 228, 287
- Bogotá, Colombia, 210, 279
- Bolsonaro, Jair, 303
- bombs, 12, 14
- Bone Morphogenetic Protein 4 (BMP4), 196
- Bonhoeffer, Sebastian and Hannah, 215, 218
- Bonn, Germany, 100
- Bonnard, Pierre, 30
- Bonner, John, 135, 148, 257, 294, 307
- Borealis String Quartet, 208
- Boris Godunov*, 258
- Bornholm, Denmark, 47
- Bosporus, 103
- Bosque (Jardin) de Cactus, San Cristóbal Island, 290
- Boston, Massachusetts, 57, 251
- botanical garden, 136, 183, 215, 247
- Botley, Hampshire, 38
- Botswana, 165–66
- Boulinier, Thierry, 247
- Bourbon Street, New Orleans, 57
- Bowen, Bill, President of Princeton University, 148
- Bowery, 60
- Boy Scouts, 17, 31, 64
- Bracciolini, Poggio, 241
- Bragg, Lawrence, 25, 213
- Brahms, violin concerto, 87
- Brandon, Manitoba, Canada, 208
- Brazil, 297, 303, 305

- Brenner, Sydney, 49, 214
 Bressan, Andrea, 243
 Brexit, 291
 Brigantine Marshes, New Jersey, 147
 Brigham Young University, 255
 Brisbane, Australia, 271, 273
 British Columbia, Canada, 12, 52–53, 63, 78, 202, 206, 208, 306
 British Trust of Ornithology, 210
 broken-branch-mimic, 269–70
 Bronowski, Jacob, 112
 bronzes, 244
 Brown University, 161
 Brown, Gordon, Prime Minister, UK, 223
 Browne, Janet, 176
 brush box, *Lophostemon*, 272
 Brussels World Fair, 1958, 46–47
 Buccaneer Cove, Santiago Island, 172
 Budapest, Hungary, 299
 Buddha: figure, 186, 189; temple, 284
 buffalo, feral, 269
 Bülachstrasse, Zürich, Switzerland, 183
 bulls, 246
 Bürgi, Regula, 140
Bursera, torchwood tree (Palo Santo), 117, 157, 175, 181, 259, 284, 290, 293
 Bush, George W., 203
 Bush, Guy, 167
 Bushmaster. *See* snakes
 butterflies, 9–10, 14, 16–18, 20, 23, 33, 38, 50, 83, 91, 105, 176, 248; Blue, 9, 176; Clouded Yellow, 18; Orange-tip, 248

 Cabo Douglas, Fernandina Island, 174
 cactus, 3, 109, 116, 157, 180, 292–93
 cactus specialist, 113, 124
 Caiman, Black, 236, 240
 Calapucho, Camilo, 117
 caldera, 175–76, 178
 Caleta Negra, Isabela Island, 172
 California, 53–56, 137, 161, 166–67, 225, 261, 294, 299, 303, 306
 Callas, María, 184

 calmodulin, 196
 caltrop. *See* *Tribulus*
 Camargue, Spain, 246
 Cammerzell, Fritz, 264
 Campbell, Neil, 255
 Camus, Albert, 303–4
 Canada, Canadian, 11, 18, 52, 54, 62, 81, 83, 85–87, 89–90, 95, 99, 102, 136, 188, 213, 227, 262, 275–76, 303
 cancer, 195, 197, 202, 260, 278–79
 Cane Toad, 268
 canoe, 71, 235–36
 Canterbury, Kent, 21, 37, 45
 Carleton University, Canada, 213
Carmelito, black-fly, 290
 Carnegie Lake, Princeton, 147, 301
 carotenoids, 24, 286
 Carroll, Sean, 254
 Carson, Rachel, 87
 Cartmel Priory, Cumbria, 66
 Caskey, Bill, 57
 casuarina, 58, 255, 269
 cathedral, 30, 37, 45, 103, 136, 212, 247, 249–50, 260, 272, 285
 Cathedral Provincial Park, 206
 cathedral termite mounds, 268
 Cather, Jim, 127
 Catholic University, Quito, Ecuador, 180
 Catholics, 250
 cattle, feral, 268
Cecropia, 176
 cemetery, Arnside (U.K.), 263
 Cenacolo, Milan, 212
 Center of Ecology, Kyoto, 189
 Chala. *See* *Croton scouleri*
 chamber orchestra, 258
 chamois, 105
 champagne, 188, 197
 Champaign-Urbana, Illinois, 131
 Changdeokgung Palace, South Korea, 185
 Chapman Fund, American Museum of Natural History, 106
 character displacement, 100, 102, 149, 195

- Charles Darwin Research Station, 108–9,
124, 143, 149, 172, 198, 210, 235, 259, 291
- Charles Darwin Scholars, 265; at Charles
Darwin University, Darwin, Australia,
265, 267, 270
- Chaves, Jaime, 209
- Checkley, Peter and Pauline, 205
- cheetahs, 166
- Cheetham, Tony, 263, 279
- chemistry, 24–25, 28, 41, 43–44, 49, 83,
217, 281
- chemotherapy, 195
- Chengdu, China, 186
- Chez Hélène*, 95
- Chigi, Agostino, 243
- Chilcotin, British Columbia, 66
- childhood diseases, 77, 306
- Chilean Pine, *Araucaria*, 272
- chimbuzos (plastic water containers), 2,
118, 283
- Chitwan National Park, Nepal, 139–40
- Chobe, Botswana, 165
- Choe, Jae, 184, 281–82
- Christ's College, Cambridge, 216, 259
- Christian, Keith, 266
- Christmas, 10, 12, 61, 89, 116, 133–34, 182,
202, 301
- chromosomes, 187, 194, 289
- Church, 28, 64, 132, 182, 211–12, 250; of San
Ambrosio, Milan, 212; of San Maurizio,
Venice, 243; of San Simpliciano, Milan,
212; of San Vidal, Venice, 243
- Church Stretton, Shropshire, UK, 38
- Churchill College, Cambridge, 164
- cicadas, 145, 185, 190, 205; seventeen-year
species (*Magicalcada*), 145, 190
- Cicero, 285
- Cicerone, Ralph, 213
- circus, 104
- citizenship: Canadian, 95; US, 261–63
- Clabaut, Céline, 205
- Clapham, Yorkshire, 31–32
- Clare Park School, Surrey, 7, 9–12, 16, 18, 29
- Clethrionomys voles*, 99, 152
- Clusia* tree, 176
- Clutton-Brock, Tim, 218
- Coca, Ecuador, 235
- coconut palms, 71, 255
- Cocos Island, 112, 176–77, 297
- coexistence, 101, 106, 113, 124, 152, 179, 230,
232, 250
- Cohn-Bendit, (Danny the Red), 87
- Colegio Nacional, Mexico, 284
- College Station, Texas, 302
- color polymorphism, 286
- Colorado River, 255
- Colt Park Wood, Yorkshire, 32
- Columbia Ice Fields, 91
- Compagnac, France, 247
- comparative religion and ethics, 225
- competition, 46, 64, 69, 71, 80–81, 98,
100–102, 105–07, 109, 113, 149, 152,
288–89
- Conant, Sheila, 255
- Coniston Old Man, Cumbria, 139
- Connecticut Agricultural Research
Station, 80
- Connell, Joe, 114
- conservation, 147, 174, 182, 213, 234, 246,
259, 279
- convalescent home, 214
- Cooke, Fred, 43
- Copenhagen, Denmark, 47, 100, 132
- Copley Medal, 279
- coppiced trees, 248
- coral core, 149
- Cordia* (muyuyo), 124, 171, 181, 200
- Cordoba, Spain, 249
- coregonid whitefish, 217
- Corfu, Greece, 107
- Corinthian columns, 248
- Corinthians, 244, 248
- Cornell University, 81
- Corpus Christi, Texas, 302
- Correa, Rafael, President of Ecuador, 237
- Corsario Negro, 178, 180

- Corvallis, Oregon, 195, 257, 277, 301–2
 CosmoCaixa Museum of Science,
 Barcelona, 207
 Costa Rica, 112, 176–77, 297
 Côte des Neiges, Montreal, 85
 Coto Doñana, Spain, 40
 Cott, Hugh, 44–45
 courtship, 101, 115, 140, 179
 Cowan, Ian McTaggart, 53, 61, 64, 74, 79
 coyotes, 219
 cranium, 263
 Crater Lake, Oregon, 54
 craterlet, 229, 292
 crayfish, 43, 81, 128, 176
 creationists, 157
 cricket, 20, 23–24, 26–27, 34, 46, 49, 51, 82
 crocodile, 44–45, 166, 269
 Crondall, Surrey, UK, 7
 Croonian Medal, 188
 cross flute (*daegeum*), 185
 Cross, James, British diplomat, 85
Croton (Chala), 125, 171, 181, 200
 Crowe, Philip, 44, 281
 Cruz, Claudio, 181
 Cruz, Lenin, 228
 Cuba, 86
 Cullen, Mike, 100
 Cunningham, Dick, 58
 Curry, Bob, 124, 130
- Dalai Lama, 186–87
 Dalí, Salvador, 39
 Dallas-Fort Worth, Texas, 55
 Dampier, William, 120, 151, 228
 Daphne Major Island, Galápagos, 1–3,
 107, 109–10, 113–19, 123–24, 140, 144,
 149–152, 155–58, 170, 177–79, 190–202,
 227–33, 254, 270, 274–75, 283, 287–93,
 305, 310
 Daphne Minor (Chica) Island, Galápagos,
 2, 107, 109, 200
 Dartmouth College, 137
 Darwin Bay, Genovesa Island, 117
- Darwin Lake, Genovesa Island, 119–20
 Darwin Medal. *See* medals
 Darwin-Wallace Medal. *See* medals
 Darwin, Charles, 38, 109, 112, 176, 182, 203,
 210, 307, 309; notebooks, 212; visit to
 Galápagos, 11–12, 283
 Darwin's finches, 3, 64–65, 105–6, 112–13,
 143, 149, 158, 166, 176, 179, 190, 203, 205,
 209–10, 212, 216, 232–33, 242, 256–57, 260,
 272, 278–80, 286, 290, 299, 305, 309; beak
 traits, 77, 101–2, 106–7, 112–13, 115–16,
 123–25, 152–53, 157, 158, 173, 195–96, 205,
 210, 216, 225, 228, 277, 286–88, 290, 292,
 310; breeding, 99, 103, 109, 123, 126,
 143–44, 149, 151, 153–57, 174, 179, 180, 192,
 194, 200, 229, 273, 292, 310; breeding
 when young, 151; development of beaks,
 196, 205, 210, 287; diets, 78, 101–2, 107,
 113, 123, 155, 232, 286; extrapair mating,
 154; food supply for, 107, 109, 115, 158,
 179, 195, 211; genome, 119, 153, 170, 192,
 198, 234, 241, 286–90; history, 170, 232;
 mate choice, 152; measured, measuring,
 1, 66, 98, 100, 107, 112–13, 115, 120, 123,
 155, 165, 171, 173, 179, 229–30, 232–33,
 290; seeds in diets of, 102, 110, 124, 288;
 seed size and hardness in diet of, 107,
 115, 124; supply of seeds for, 116, 125,
 152–53, 179, 195, 290; territories, 115, 154,
 192, 289
 Darwin's life in Korean, 283
 Darwin's Way, 281, 283
Darwiniothamnus, 298
Das Rheingold, 258
 DDT, 88
 de Falla, Manuel, 280
 De Roy, Tui, 291
 de Vries, Tjitte, 109, 180
 dead-fish walk, 163, 184, 208
 deafness, 169
 Death Valley, California, 55
 Debrecen, Hungary, 299
 deer, 189, 261

- Defoe, Daniel, 310
 Delaware Water Gap, 147
 Denisovan, 152
 Department of Ecology and Evolutionary Biology. *See* EEB
 Desert (Botanical) Garden, Australia, 271
 deserts, Egyptian and Libyan, 45
 Detroit, Michigan, 127–28, 305
 Devon, grandson, 162, 208, 291
 Dexter, Ted, 46
 Dhondt, André, 137
 Dhunche, Nepal, 140
 diabetes, type 1, 206
 Diamond Head, British Columbia, 66
 Diamond, Jared, 131, 260
 diary, 54, 301
 Dijkgraaf, Robbert and Pia, 263
 dinner plates, gold, 243
 dinosaur, 102, 165, 208
 diver, 245, 269
 divergence, species, 101–2, 113, 195, 232
 diversity: biological, 16, 41, 55, 105, 112, 170, 189, 197, 225, 230, 232, 235–36; microorganism, 197; plant, 156
 Division of Biological Sciences, 127, 129
 divorce, 5, 7, 15, 18, 65, 161
 DNA, 233, 279, 287–290
 Dobson, Chris, 281
 Dobzhansky, Theodosius, 165
 Dohrn, Anton, 244
 dolphins, 236, 240, 306
Don Carlos, 258
Don Pasquale, 258
 Douglas Fir, 208
 Downe House, Darwin's home, 283
 dragon tree (*Dracaena draco*), 211
 Drierite, 154
Drosophila flies, 81
 drought, 115, 149, 151, 153, 156, 192, 195, 199, 287
 drums, 185
 Dubrovnik, Croatia, 105
 Duke of Edinburgh, 143. *See also* Prince Philip; of Westminster, 37; of York, 278
 Duriez, Olivier, 248
 Durrant, Philip, 48–49
 Durrell Wildlife Conservation Trust, 174
 earthworms, 5
 East Hanney, Oxford, 100
 Eaton Hall, Cheshire, 37
 Eberhard, Bill, 176
 Ebert, Dieter, 215, 260
 ecological modeling, 81; niches, 49, 69, 109, 124, 265, 299, 310; opportunity, 265
 ecology, ecologist, 43, 50, 64, 68–69, 77–78, 81, 87–88, 93–94, 100, 105–6, 109, 112–23, 124, 128–29, 131–32, 136–37, 142–43, 147, 152–53, 179, 182, 184, 189–91, 204, 219, 226–27, 229–230, 232, 234, 249, 257, 259–61, 265, 279, 281–82, 284, 290, 299–300
 ecosystem, 107, 149, 156, 166, 265, 279
 ecotourism, 18, 297–98
 Ecuador, Ecuadorians, 1, 174, 180, 198, 206, 209, 237, 242, 291, 297
 Edge, Bill, 29
 Edo period, Japan, 224
 EDTA, binding agent, 154
 Edwin B. Forsyth Reserve, New Jersey, 147
 Edward Grey Institute of Ornithology, Oxford, 137
 Edwards, O. C., Jr., 58
 EEB, 148, 153, 205, 225, 263
 Egypt, 38, 45, 285
 Egyptian representation of man and woman, 275
 Ehrlich, Paul, 182
 Ehrlich and Mooney Lecture, 299
 Eisgruber, Chris, Princeton University president, 295
 Ekman, Jan, 165
 El Escorial, Spain, 40
 El Greco, 30, 40
 El Niño, 2, 144–45, 149–56, 159, 171, 194, 292
 elephant, 139, 166
 elephant grass, 139

- Elizabeth Bay, Isabela Island, 174
embryos, 198
emeritus professor, 205, 263
Emlen, Doug, 219
Encenillo Nature Reserve, 210
enclosures, 80, 98–100, 208, 302
engagement ring, ruby and diamond, 134
Ennion, Eric, 31
Eno Hall, Princeton University, 143–44, 168, 220
Enryaku-ji, Japan, 189
environment: degradation of, 87–88, 169, 204, 221; fluctuating, 149, 191, 198, 233–34
Epicurus, 241
Erken, Sweden, 131, 247
Erlinge, Sam, 132
Biomonte, Esteban, 297
ETH, Zürich, 218
Etosha, Namibia, 165
Etruscan Museum, Rome, 243
Europe, European, 38, 45, 57, 61, 64, 82, 103, 113, 119, 138, 140, 160, 164, 203, 207, 210, 214–16, 218, 221, 243–44, 248, 265, 267, 270, 273, 277, 285, 299
European Society for Evolutionary Biology, 299
European Union, 270
evacuation from London, 7
Evans, Dr., 41
Evans, Jeremy, 27, 29
Evans, Walter and Mary, 55, 295
Evelyn, John, x
events, extreme, 88, 149, 156, 171, 234
Everglades, 58, 258–59
evolution, 30, 43, 50, 53, 55, 68–69, 87, 94, 98, 100, 105, 111–12, 115–16, 123, 128, 129–31, 142, 143, 147, 152–54, 158, 171–72, 190, 194, 197–98, 202, 204, 212, 214–15, 217, 219, 225–27, 231–36, 241, 244, 254–55, 258, 265–66, 268, 279, 287, 294, 299, 310
evolutionary biology, biologist, 94, 142, 165, 167, 189, 231, 234, 241, 244, 255, 275–76
evolutionary history, 98, 102, 154–55, 157, 279, 287
Ewen, Mr., careers master, 25
excrement of the gods, 188
Exeter University, 260
exobiology, 82
experiments, 43–44, 51, 68, 80–81, 89–90, 94, 99–103, 115, 148, 151, 165, 204, 233
Expo 67, 86–87, 134
extinct, extinction, 30, 112, 170, 172, 181, 195, 218, 232, 271, 290
Facts on File, Films Media group, 254
fagotto, 243
father, 5–7, 9–10, 12–13, 15–17, 20–24, 26, 28, 30, 32–33, 51, 160–61, 255, 266
Father Junípero Serra, 55
Fellow of the Royal Society of Canada (FRSC), 188
Fellow of the Royal Society of London (FRS), 161, 188, 205, 263
Felsenstein, Joe, 131
Fermat's Last Theorem, 279
Ferme d'Ajas, 247
Ferrand, Nuno, 248
Festival of Britain, 32
fibra, 292
fiddler crabs, 296
Field Studies Council, 61
figures, in red iron-ore, 261
Filewood, Lin, 93
films, of Daphne finches and moths, 230–31, 254
Finch Investigation Unit (FIU), 130, 283
Finland, independence anniversary, 260
Finnbogadottir, Vigdís, Iceland president, 276
Finnish Academy of Science, 260
Finnish Science Society, 260
fireplace, 8, 89, 127–28, 143–44
fires, 189, 268
First Nations, 188, 206, 208
fish, fishing, 5, 48, 50, 64, 70, 104, 120, 163, 178, 198, 217, 234, 236, 244, 268

SUBJECT INDEX 325

- Fisher, James, 54
 Fisher, Ronald, 212
 Fisherman's Wharf, San Francisco, 54
 fishermen, 71, 73, 104, 180, 198, 217
 fjords, 276–77
 fleas, 304
 Florida, 53, 58, 93, 301
 flowers, alpine, 66, 68, 91, 105, 164
 FLQ (Front de Libération du Québec), 85–86
 fly buttons, 83
 flying fox (fruit bat), 266
 Fontana, Carlo, Balzan Foundation vice president, 211
 Fort Lauderdale, Florida, 58
 Fortuna, Miguel, 249
 Forum, 243
 fossils, 43, 102, 170, 217, 244, 286
 Foster, Bristol, 62, 169
 Fox, H. Munro, 24
 French, 16, 24, 30, 33–34, 47, 85, 87, 119, 128, 140, 197, 223
 French Revolution, 216
 frescoes, 244
Fritillaria plants, 163
 Fritillary, Glanville, 38
 frogs, 268
 Fry, Bill, 43
 Fry, Hilary, 43
 fumaroles, 175, 178
 Fundación Canaria Orotava de Historia de la Ciencia, 211
 fur seal, 199
 Furnas, Azores, 217–18
 Fyris River, Uppsala, 163

 Gage, Walter, University of British Columbia dean, 79
 gala concert, 225, 280
 Galápagos, 1, 11, 35, 64, 105, 107–8, 110–14, 120, 121, 130, 132, 143, 149, 150, 155, 158, 160, 162, 166, 170–72, 174, 177, 181–84, 191, 193, 198, 200–201, 203–4, 228, 234–36, 257–60, 280, 283, 286, 289–92, 298, 305, 309, 311
Galápagos Affair, The, 260
 Galápagos Islands: Baltra, 228; Champion, 171; Daphne (*see* Daphne Major and Daphne Minor); Darwin, 174; Española, 171, 192, 234, 288; Fernandina, 172–75, 177–78, 200, 291; Floreana 171, 180–81, 260, 290; Gardner by Española, 288; Gardner by Floreana, 171; Genovesa, 117–18, 120, 123–25, 130, 132, 143–44, 148, 151–52, 155, 157, 171, 179, 199, 209; Isabela, 120–21, 177; Marchena, 117, 120–21, 200; Pinta, 117, 124, 171, 179–80; Pinzón, 170; Plazas, 28, 291; Rábida, 180; Santa Fe, 291; Santiago, 149, 172, 174, 200, 202–3; San Cristóbal, 180–81, 289–90; Santa Cruz, 3, 107–9, 149, 151, 200, 228, 288, 291; Wolf, 124–25
 Galápagos Conservation Trust, 259
 Galápagos National Parks Directorate, 172, 178, 198, 235, 291
 Galápaguera Tortoise Reserve, 181
 Gallerie dell'Accademia, 243
 Garachico, Tenerife, 211
 Garibaldi Park, British Columbia, 66, 167
 garnet and pearl brooch, 134
 Garnett, Stephen, 266, 268
 Gault, Brigadier, 89
 Gee, Jennifer, 205
 General Certificate of Education (GCE), 24–25, 27–28
 genes, 50, 73, 115, 119, 123, 129, 134, 140, 143, 152–55, 165–66, 170, 210, 219, 233–34, 257, 279, 286–89, 309–10; resistance to malaria, 140; variation and heritability, 115, 286
 genetics, geneticist, 43, 49–50, 65, 68, 94, 102, 112, 129, 154, 165, 196–98, 214–15, 217–18
 genome, sequencing of, 4, 119, 153, 170, 192, 197–98, 212, 218, 234, 241, 286–90, 301

- genoscope, 119
- geologist, German 35
- George, itinerant Englishman, 104
- Gertler, Meric, University of Toronto
 - president, 274–75
- Gesell, Arnold, 94
- Getty, Tom and Christine, 133
- Geysir, Iceland, 216–17
- Giacometti, artist, 184
- Gibbs, Lisle, 116, 130, 149
- Gingy, pet cat, 95, 127, 134
- Ginkakuji, Japan, 189
- gingko seeds, 224
- giraffe, 166
- Girton College, Cambridge, 223
- gladiators, 245
- global warming, 88
- goats, 103, 117, 175, 178, 248
- Gobabeb Desert Research Station, 165
- Golden Gate Park, San Francisco, 54
- Gondwanaland Forest, 93, 272
- Gora Tablea, Nepal, 140
- Gordon Research Conference, 294
- Gorges du Tarn, France, 247
- Goose Island State Park, Texas, 302
- Gosainkunda, Nepal, 141
- Gothenburg, Sweden, 136
- Gotland, Sweden, 227
- Gould, John, 112
- Grace New Haven Hospital, 83
- Granada, Spain, 40, 249–50
- Grand Canyon, 55, 94, 175
- Grand Coulee, 208
- Grant, Peter R., deceased, 264
- Grantfest, 202
- Grant's Way, 281
- grasses, 9, 25, 32, 34–35, 153
- grassland vole, *Microtus pennsylvanicus*, 99
- Graveney, Tom, 46
- Great Smog, 1952, 32
- Great St. Mary's Church, Cambridge, 182
- Great Wall, China, 186
- Greaves, Melvyn, 278–79
- Greece, 101, 103–4, 107, 115
- Greenblatt, Stephen, 241
- Greene, Erick, 117, 219
- Greenhills School, Ann Arbor, 127
- Greenwood Conservation Area, 147
- Greg, son-in-law, 11, 162, 197, 208, 228
- Gresham's School, Norfolk, 82
- Grieg, Edvard, 48, 276
- Griggstown, near Princeton, 301
- Grossman, Edith, 296
- Grosvenor Avenue, Montreal, 85
- group selection, 130
- Guadalajara, Mexico, 76
- Guarda, Switzerland, 31, 215, 248, 277
- Guatemala, 297
- Gugak-Gayo (Road to Sampo), 185
- guides, 11, 58, 93, 122, 140, 148, 166, 170, 186,
 - 197, 211, 224, 235–36, 248, 283, 291, 297
- Guildford, Surrey, 36
- Gulbenkian Institute for Science, 214
- Gulf Coast, Mexico, 255, 302
- Gulfoss, Niagara of Iceland, 216–17
- guns, 71, 73, 75, 303
- Gustavus Adolphus College, Minnesota,
 - 183
- Guyot Hall, Princeton University, 225, 254
- habitat, destruction of, 88, 175, 178, 218, 257
- Habitat, building for Montreal Expo, 134
- Hadrian, Roman Emperor, 246
- Hagia Sofia, Istanbul, 103
- Haida Gwaii, 188
- Haldane, J. B. S., 212, 241
- Haleakala, Hawaii, 256
- Half Dome, Yosemite, 54
- Hall, Katie, 296
- Hamilton, Bill and Christine, 59, 129, 138
- hammerhead shark, 174
- hammock, 59, 259
- Hanseatic League of German traders, 48
- Hanski symposium, 260, 276
- hare, gigantic, 217
- Harrer, Heinrich, 186

- Harrison, David, 44
 Harvard University, 61, 135, 189, 196
 Hau, Michael (Ela), 175
 Haus zum Rügen, Zürich, 219
 Hawaii, 73, 167, 242, 255–56
 Hawaiian Petrels, 175
 hawkmoths (sphingid), 6, 230
 Haydn, 218
 Hedley, British Columbia, 206
 Heinz Hafner Lecture, 246
 Hekla, Iceland, 216
 Helsinki, Finland, 132, 260, 276
 hepatitis, 10, 77
 Herculaneum, Italy, 244
 heritability, 115. *See also* genes
 hernia, abdominal, 197
 Hill Auditorium, 128
 Himalayas, 139
 Hinde, Robert, 43
 Hindu wedding, 161–62
 hip replacement, 197, 235, 251
 Hirakawa, Naoki, 219
 hitchhike, 31, 38–39, 47, 52, 54, 62, 295
 Hitschfeld, Walter, McGill University dean, 106
 HMGA2 gene, 287–88
 hockey, 23, 26, 37, 41, 46, 77, 93, 162
 Hoeck, Hendrik, Director Charles Darwin Research Station, 210
 Hoffmann, André, 246
 Hoffmann, Luc, 246
 Hoffmann, Roald, Nobel laureate of chemistry, 207
Holbrookia lizards, 80, 95
 homework, 118
 homoploid hybrid speciation, 194, 232
 Honolulu, Hawaii, 167
 honorary citizens, 203
 honorary degree, 95–96, 142, 203, 207, 274–75, 295–96
 Honorary Fellow, Selwyn College, 281
 hookah pipes, 103
 Horn, Henry, 135, 142–43, 147, 294
 horn, Tibetan instrument, 186
 hospital, 10, 59, 83–84, 90, 122, 127, 153, 161, 163, 190, 233, 247, 250–51, 278, 302–304
 Hotel Carmen de la Victoria, Spain, 249
 Hotel Imperial, Tepic, 75
 Hotel Vík, (Hotel Puffin), 216
 Howard Hughes Medical Institute, 254
 Howarth, Francis, 255
 Huelva, Spain, 40
 Huicholes, indigenous Mexicans, 74, 76
 human figures, spindly, 268
 human genome, 152, 197
 Hungarian Academy of Arts and Science, 299
 Húsavík, Iceland, 34
 Hutchinson, Evelyn, 28, 79, 81–83, 136, 244
 Huxley, Thomas, 8, 138
 Hveravellir, Iceland, 35
 hybridization, 35, 123, 152, 154–55, 165, 170, 183, 194, 228, 233, 256, 279, 287, 289–90, 294
 hybrids, 35, 151–52, 155, 180, 194, 229, 288–89
Hypericum, 298
 Hyundai vehicle, 267
 ibex, 103
 Iceland, 29, 34, 38, 90–91, 216–217, 276
 Icod de los Vinos, Tenerife, 211
 Idlewild Airport (JFK), 60
 igloo, 68
 immigration, 261
 immune system, 6
 imposter, 213
 Impressionists 30, 205
 imprinting, 18, 133, 233
 Inamori Foundation, 219–220
 Inamori, Kazuo, 221, 223, 229
 Inamori, Toyomi, 219
 inaugural walk, 283
 inbreeding, 195
 India, Indian 162, 196, 262
 induction ceremony, 188, 205, 207
 Ingstad, Dr. Helge, 90

- inheritance tax, 261
- insect larvae, 9, 174, 257
- insectivores, 265
- Inspector Island, 90
- Institute for Advanced Studies, 147, 263
- Institute of Catalan Studies in Barcelona, 214
- Institute of Zoology, Zürich, 164, 183, 202
- INTECOL meeting, 184–85
- intelligent design, 212
- interbreeding, 101, 113, 154, 180, 229, 232–33
- International Society of Behavioral Ecology
 - Congress, 260
- International House, Darwin, Australia, 265
- International Ornithological Congress,
 - Beijing, 185; Canberra, 93, 271; Vienna, 167
- internet café, 235
- Interpreti di Veneziana, 243
- interview with the Press, 225, 266, 279–81
- introduced species: blackberry (*Rubus*),
 - 181; *Cryptomeria* trees, 218; disease, 257;
 - foxes and cats, 271
- invertebrates, 244
- Iran, 101, 103–4, 115, 302
- Irvine, California, 166
- Isfahan, Iran, 102
- Isherwood, Christopher, ix
- Ishpingo-Tambococha-Tiputini oilfield, 237
- Island Biology Conference, 217, 255
- Isle of Ely, 46
- Isle of Wight, 38
- Isle Sainte Hélène, 86
- Istanbul, Turkey, 103
- Istituto Veneto di Scienze, 243
- Italy, 105, 242, 302
- Ives, Map, 166
- Ivy League, 136
- Izurietta, Arturo and Alexandra, 291
- Jackman, Brian, 5, 7, 15, 18, 33
- Jackson, Lisa, 254
- Jackson, Mary, 62, 68
- jaguar, 236, 239, 285
- Jakobsen, Ranveig, 219
- Jamaica, Jamaican, 137, 262
- Janzen, Dan, evolutionary ecologist, 226
- Japan, Japanese, 188–89, 219, 222–224, 284
- Japanese Ecological Society, 189
- Jasper, Alberta, 91, 208
- Jeizinen, Switzerland, 164–65, 248
- Jennersten, Ola, 137
- Jensen, Jamie, 255
- Jeong, Gilsang, 283
- Jesus College, Oxford, 137, 139
- jewelry, 60, 134, 245
- Jews, Jewish, 250
- Joan of Arc, 213
- Johanssen, Alice, 89
- Johanssen, Jack-Rabbit, 89–90
- Johnson, Dr. Louis, 98
- Johnson, Marc, 275–76
- Jokhang Temple, 186–87
- Jolly, Alison and Richard, 11
- Jones, Bob, 24, 32
- Juncus balticus* x *filiformis*, hybrid rush, 35
- Jyväskylä, Finland, 261
- Kaibab Squirrels, 55
- Kakadu, Australia, 268–69, 285
- Kalff, Jaap, 87, 209
- Kansas City, Missouri, 80
- Kathmandu, Nepal, 139–40
- Katz, Laura, 261
- Kavala, Greece, 103–4
- Keller, Lukas, 110, 157, 187, 195
- Kelly, Frank and Jackie, 259
- Kemp, Alan, 165
- Kennedy, Donald, 81
- Kennedy, Roy, 34–35
- Kenya, 305
- Kidlington, near Oxford, 100
- Kigoshi, Kiyohiko, 219
- Kim Dae-Jung, South Korea president, 185
- Kim, Jongmin, 283
- kin selection, 129
- kings: George IV, 277; George VI, 14; Henry
 - VII, 259; Henry VIII, 5, 21, 259

SUBJECT INDEX 329

- kingfishers, 93, 265
- Kingston, near Princeton, 147, 301
- Kinkaku-ji, golden temple, Japan, 224
- Kinsey, Herb, 59–60
- kitchen cave, 3, 156, 227, 231
- Knoll, Andy, 218
- Koinzan Saihoji (Koke-dera), moss temple, 224
- Kon Tiki, 120
- Korean Folk Village, 185
- Kotor (Cattaro), Montenegro, 104
- Krebs, John, 100
- Kreitman, Marty, 143, 153
- Kristine Bonnevie lecture, 217
- Kunz, Thomas, 203
- Kurtis, Bill, 158
- Kyang Jing, 140
- Kyoto, Japan, 189

- L'Anse aux Meadows, Newfoundland, 90
- La Bomba, Santiago Island, 172
- La Brea tar pits, Los Angeles, 55
- La Convivencia (coexistence), 250
- La Gioconda's smile, 206
- La Mezquita, Moorish mosque, 249–50
- La Niña, 149, 228
- La Scala, Milan, 211
- La Traviata*, 184
- Lac Hertel, 89
- Lack, David, 50, 64–65, 78, 106–7, 112–13, 137, 166
- Lady Margaret Beaufort lecture, 259
- Lake District, Cumbria, U.K., 100, 139
- Lake Louise, 52
- Lake El Junco, Galápagos, 181
- Laki, Iceland, 216
- Lama Hotel, Nepal, 140
- Lamichhaney, Sangeet, 192, 288
- Lamington Plateau, Queensland, 93, 271
- Land Iguana, 176, 291
- Landweber, Laura, 284
- Langtang Valley, Nepal, 140–41
- Lantana, *Lantana camara*, 290

- Larson, Mrs., French teacher, 128
- Las Ramblas, Barcelona, 39, 207
- Las Varas, Mexico, 75–76
- laser, 119, 263, 309
- Latin, 16, 27–28, 33, 239, 241, 297
- Látrabjarg, Iceland, 277
- lava: eruption, 174, 216, 273; flow, 211, 216
- Laxness, Halldór, 276
- law of parsimony, distrust of, 289
- Lazcano, Antonio, 284–85
- Le Sambuc, 246
- leave-of-absence, 10, 39, 79, 94, 100, 113, 137, 148, 160
- leeches and ticks, 273
- Lefebvre, Louis, 274–75
- leg bands, colored, 107, 256
- Lego, 185, 255
- Leidy Medal, Academy of Natural Science in Philadelphia. *See* medals
- Leki, 197, 256. *See also* walking stick
- Lemonick, Aaron, Princeton University dean, 148
- Leopard, 103
- Lester, Jack, 25
- Lévesque, René, 86
- Levin, Simon, 143, 205, 226
- Levine, Arnie, 147
- Levins, Richard, 81
- Lhasa, Tibet, 186–87
- library, 49, 96, 165, 186, 205, 296
- limestone country, 32, 102, 245–48, 247
- limnology, South African Lakes, 83
- Linnean Society, 212
- lions, 102, 166
- Lisbon, Portugal, 214
- Litchfield National Park, Australia, 267–69
- Livingstone, Dr. Frank, 163
- lizards, 80, 95, 176, 217, 225, 265
- lockdown, 305
- Lombardy Poplar, 15
- London, UK, 7, 14, 16, 18, 20–25, 27, 30, 32–33, 36, 39–40, 48, 51, 113, 138–39, 197, 205, 212, 278–79, 281, 297, 304, 306

- Long Mynd, 38
 long-term research, field study, 116, 133, 144,
 147, 154–55, 171, 174, 227, 232, 234, 236, 254,
 275, 291, 305
 Long, Huey P., 58
Lord of the Rings, The, 119
 Los Angeles, California, 55, 294
 Losos, Jonathan, 225
 Louis Thaler lecture, 247
 Lovejoy, Tom, 81
 Lucerne, Switzerland, 184
 Lucretius, 241
 Lukashenko, Alexander, Belarus, 303
 Lund, Sweden, 132–33
 Lundberg, Arne, 163
 Lynn, Vera, 14
 lynx, 52
- M'Closkey, Robert, 94
m'ýri, marsh, Iceland, 35
M'ývatn, Iceland, 34, 90
 MacArthur, Robert, 77, 81, 106, 142, 147
 MacArthur's Bog, 147
 machete, 68, 73, 117
 Machu Picchu, Peru, 249
 MacLachlan, Gordon, biochemist, 94
 MacMillan, H. R., 64
Macraea, 181
 Maddocks, Simon, Charles Darwin
 University chancellor, 266–67
 Madison, Wisconsin, 169
 Madrid, Spain, 39–40, 280–81, 284
 Magdalene College, Oxford, 139
Magiccicada cicadas, 145
 magnetic termite mounds, 268
 Mahler, Gustav, 280
 Mahogany Hammock, 259
 mail, 122, 148, 235, 263, 277, 285, 294
 Major Cowan, 38
 Majorca, Spain, 217
 Málaga, 61
 malaria, 46, 140, 257
 malas, 271
- Malham, Yorkshire, 31
 Malibu, California, 295
 Mallarino, Ricardo, 196
mandap, 161
 Mandarte Island, British Columbia, 66,
 167, 227
 mangroves, 73, 172, 180, 266
 Manitoba, Canada, 52, 90, 208
 Manning Park, British Columbia, 68
manoir, 247
 manta ray, 228
 Mappes, Johanna (Jona), 261
 Margulis, Lynn, 203
 María Cleofas, Mexico, 73. *See also* Tres
 Marías islands
 María Madre, Mexico, 73. *See also* Tres
 Marías islands
 María Magdalena, Mexico, 71–74. *See also*
 Tres Marías islands
 market, 38, 70, 74, 83, 128, 132, 143, 186, 215, 231
 Marlar, Geoffrey, 28
 Marquesas, 120
 marsupial mammals, 93, 270–71
 Martin, Jean-Louis and Silvie, 247
 Martin, Mike, 129, 148
 Massive Open Online Course (MOOC), 266
 Matchett family, 113, 263; Andrew, 205; John
 and Moira, 221; Rosemary, 78–79
 math and physics conference, 249
 mathematics, 23–24, 81, 119
 Mattingly, David, 190, 250–51
 Maui, Hawaii, 256–57
 Maun, Botsawana, 165
 Max-Planck Institute, 164–65
 May Ball, Trinity College, 51
 May, Bob, 135, 138, 147, 188, 218
 mayor, Puerto Baquerizo Moreno, 203
 Mayr, Ernst, 189
 Mazatlán, Mexico, 75
 McCaughan, Judy, 144
 McComb, Karen, 247
 McCosh Hall, Princeton University, 182, 225
 McDonald Properties, Corvallis, 302

SUBJECT INDEX 331

- McGill seedcracker, 107
- McGill University, 80, 87–90, 95–96, 98–99, 130, 147, 205, 274
- McKaige, Maryanne, 266
- Medals, received: Darwin, 188; Darwin-Wallace, 212; Leidy, 167; Royal (Queen's) 277
- Medawar, Peter, 191
- Media Center Lab, 231, 254
- medical doctor, 181, 192
- medical school, 247, 275
- medieval, 103, 207, 215, 247
- Mediterranean, 33, 103, 246–47, 295
- megalithic site, Douro River banks, 248
- Melderis, Dr. A., 34
- memory, bias, x, 161
- Mendelssohn, Felix, 219
- Menton, French Riviera, 34
- Merlen, Godfrey, 291
- Meszena, Geza, 299
- metastasis, 279
- Meteor Crater, 55, 94
- meteoroid, 119
- Metropolitan Opera House, 258
- Metropolitan Touring Company, 120
- Mexican Free-tailed bats, 255, 302
- Mexican rattlesnake, 94
- Mexico City, 70, 187, 284–85
- mice, 98–100, 134, 148
- Michigan, ii, 37, 95, 113–14, 127–31, 135–36
- microcosm, 232
- microsatellite DNA, 192, 288
- Midwest Population Biology Conference, 131
- migrating birds, 259
- Miguel Cifuentes Building, Santa Cruz Island, 291
- Milan, Italy, 211–12
- military service, 12, 36–38
- Millington, Stephen (Spike), 283
- Milstein, Nathan, 87
- mince pies, 301
- Ministry of Environment, 198, 280
- Minnesota, 167, 183
- Minorca, Spain, 217
- mire, 261
- Miss Edgar's and Miss Camp's school, Montreal, 94
- missile, 236
- Mississauga campus, University of Toronto, 274–75
- Mississippi, 59
- Misso, Michael, Director of Uluru National Park, 270
- Missouri Botanical Garden, 183
- mist net, 43–44, 178, 205, 228
- Mitcham Common, London, 25, 30, 61
- mitochondrial DNA, 112
- mó* (heath), Iceland, 35
- Möggingen, Radolfzell, 165
- molecular biology, 49, 81, 102, 135, 143, 147, 244, 283
- molecular dating, 278
- Molina, Raquel, Galápagos National Parks, 198
- monastery, 39–40, 212, 215, 241
- Monet, Claude, 205
- monks, 185, 187
- monkeys, 236, 240; capuchin, 236; howler, 236; spider, 236; squirrel, 236; titi, 236
- Mont Saint-Hilaire, Quebec, 89, 99
- Montana, 219, 299
- Montpellier, France, 247
- Montreal, Quebec, 62, 85–86, 90, 93, 95–96, 98, 100, 105–6, 115, 127–28, 134–35, 160, 187, 199, 205, 209, 219
- Montreal Star*, 199
- Montserrat, Spain, 39, 215
- Montufar, Carlos, Rector USFQ, Ecuador, 203
- moon, giant, 169
- Mooney, Hal, 299–300
- Moorish influence, 40, 249
- moose, 261
- Moremi, Botswana, 165
- Morgan Arboretum, Macdonald College, Quebec, 98–99
- Morgan City, Louisiana, 58

- Moroccans, 245
 Morocco, 40
 mortality, 115, 155, 195, 302
 Morton, John, 44
 Mosey, Roger, Master of Selwyn College, 281
 mosquitoes, 179
 Mosuc, Elena, 184
 moths, 6, 9, 17, 230–31, 240; Burnet, 9;
 Cinnabar, 9. *See also* hawkmoths
 mother: mine, 4–9, 61, 73, 87, 124, 160, 207; of
 others, 60, 70, 104, 124, 138–39, 154, 160, 162
 Mounce, Hanna, 256
 Mount Hiei, 189
 Mount Kurama, 189
 Mozart, 207, 299
 Mt. Laurel, New Jersey, 261–62
 Muddy boots biologists, 283
 Muir, John, 54
 mulled wine, 182, 301
 Muller, Hermann Joseph, 212
 Munich, Germany, 248
 Municipal Science Center for Youth,
 Kyoto, 221
 Museum: general, 56, 59, 81, 100, 106, 113,
 241, 245, 277, 283–85; of Natural History,
 (American) 18, 66, 106; of Anthropology,
 University of British Columbia, 208; of
 Anthropology, University of Mexico,
 284; of Antiquities, “blue” 245; of
 Archaeology, Naples, 244; Banpo, China,
 186; of Civilization, 188; of Gold, Bogotá,
 210; of musical instruments, 243; Natural
 History, London, 16, 23, 30, 33, 38, 44, 138,
 147; of Natural History, Milan, 211; of
 Natural History, Stockholm, 214; Prado,
 Madrid, 39; of Zoology, Cambridge, 50,
 225; of Zoology, Royal Ontario Museum,
 Toronto, 209; of Zoology, University of
 Debrecen, 299; of Zoology, University of
 Michigan, 131; specimens, 18, 101, 115, 172
 mushrooms, gills of, 248
 music, 5, 48, 52, 128, 140, 181–83, 185, 208, 212,
 223, 243, 258, 280, 299–301
 musical instruments, exhibition of, 243
 Muslim, 250
 Muyuyo. *See Cordia*
 mythological birds and jaguars, 285, 298
 Mývatn, Iceland, 34, 90
 Naesosa, South Korea, 283
 Nagamoto, Toshio and Beverley, 278
 Nakashima, Doug, 117
 Nan, 20
 nanopore machines, 290
 Naples, Italy, 244
 Napo River, Ecuador, 235
 Nassau Hall, Princeton University, 295–96
 Nassau Street, Princeton, 145
 National Academy of Science, 205, 207, 209, 213
 National Arboretum, Korea, 185
 National Art Gallery, London, 30, 39
 National Gallery, Ottawa, 188
 National Geographic Society, 106
 National Health Service (UK), 180
 National Institute of Ecology, South Korea,
 281–82
 National Parks Office, Galápagos, 117, 228
 National Science Foundation, 154
 National Service (UK), 73
 National University of Mexico (UNAM),
 70, 284
 Natural History Society, Cambridge, 43
 natural selection, 101, 111–13, 115–16, 123,
 287–88, 153, 155, 158, 170, 191, 195, 231–33,
 241, 287–88, 310
 Neanderthal, 152
 Nebraska, 94, 129
 Nelson, British Columbia, 12
 Neotropical Ornithological Conference, 297
 Nepal, 139–41
 nestlings, 123–24, 174, 231
 netting, 44, 125, 175–76, 230–31, 269, 290. *See*
 also mist nets
 Nettleship, David, 216
 Neurac Institute, 251, 253
 neurologist, neurophysiologist, 163, 244

SUBJECT INDEX 333

- New England Baptist Hospital, 190, 250
 New Guinea, 93, 265–66
 New Haven, Connecticut, 80, 83, 257
 New Jersey, 135, 146, 161, 261, 305
 New Media Center, 231, 254
 New Mexico, 55, 161
 New Orleans, Louisiana, 55–57
 New Otani Hotel, 255
 New Year's Day, 90, 169, 301
 New York, 52–53, 60, 66, 158, 258
New York Times, 158, 264
 New Zealand, 50, 164
 Newfoundland, Canada, 90, 216
 newts, 5, 10
 niches, ecological, 49, 69, 109, 124, 265, 299, 310
 Nicola, daughter, 83–84, 86, 92–94, 104–5, 108, 115, 117, 124, 127–28, 137, 139, 158, 161–62, 209, 241, 257, 295, 301, 307
 Nicola Lake, 66
Nights in the Gardens of Spain, 280
 Nijo-jo, Japan, 224
 Nipissing University, Ontario, 213
 nipple, 231
 Nobel Conference, 183
 Nobel Prize, 25, 191, 207, 214, 219
 Noh play, 223
 Nonsuch Park, 5, 18, 21
 Noor, Mohamed, 212
 Norberg, Ulla and Åke, 136
 Norbury, London, 20–21, 47–48, 53
 Nordeste, 218
 Nordhaus, William, Yale economist, 280
 Nordic: Center, Reykjavik, 276; Ecology Council, 132
 North African district, Arles, 245
 North Carolina, 151
 North Downs, Oxford, 100
 North, Peter, Jesus College Oxford, 139
 Norway, 47, 55, 89–90, 132, 276, 295
 nosebleeds, 37, 204
 Notre-Dame cathedral, 33, 45, 247
 Nuttall Ornithological Society, 189–90
 O'Reilly's Rainforest Retreat, 93, 271
 Oahu, Hawaii, 255
 oaks, 9, 11, 32, 74, 89, 215, 248, 302
 Oath of Allegiance, 261–62
 Obama, Barack, 213, 262
 Oberdörster, Uta, 190
 Ocampo, Diego, ornithologist, 297
 Ochoa, Ellen, astronaut, 296–97
Ochotona princeps, pika, 91
 octopus, 120, 199
 Odda, Norway, 48
 oil drilling, 235, 237
 Okavango, Botswana, 165–66
 Olden Lane, Princeton, 263
 Olivia, granddaughter, 162, 206, 208
 Olivier, Lawrence, 87
 Olympic Games, Tokyo, 77
 opera, 105, 128, 211, 258
 operations, medical, 195, 197, 202, 250, 278
Ophioglossum vulgatum, fern, 34
Opuntia cactus, 180, 290
 Orange Street, New Haven, 258
 oration, 266, 270
 Orchard Close, Arnside, Cumbria, 134, 139
 orchestra, 128, 211, 221, 223, 258, 280
 Oregon, 54, 278, 294, 301, 305
 origin of new species, 166, 192, 210, 218, 272, 281, 288
 Osborn Hall Room 400, Yale, 258
 oscillating directional selection, 153, 195
 Oslo, Norway, 47–48, 132–33, 217
 Oster, George, 231
 Ottawa, Canada, 90, 145, 213
 Oxbridge, 60, 148, 223
 Oxford, UK, 10, 46, 50, 52, 58, 100, 102, 113, 133–34, 137–38, 182, 202, 215
 oxygen, 250–51
 Pääbo, Svante, 218
 Paestum, Italy, 244, 269
 Painted Desert, Arizona, 55
 paleoecologist, 244
 Palatine Hill, 243

- Palazzo Corsini, Rome, 243
 Palin, Rita, 145, 188
 palm, 70–71, 176, 255
 Panama, 176, 297, 305
 pandemic, 304
panga, 1, 108, 173–74, 180
 pangolins, 302
 Pantin, Carl, 41, 244
 Papua New Guinea, 93, 266
 Paraíso Quetzal Lodge, 297
 Páramo, 298
 Parer, David, 158
 Paris, France, 33, 45, 47, 87, 100
 Park Grass experiment, Rothamsted, 204
 Parrington, Francis, 43
 Parry, Dr., 50
 Parsons, Bert, 27–34
 Partridge, Linda, 218
 Pasang Sherpa, 140–41
 Paseo de Recoletos, 280
 Passe, Nick, 251
 Passport Office, Philadelphia, 55–57, 262–63
 Pasztor, Liz, 299
 Patreksfjörður, Iceland, 276
 Peabody Museum, 81, 258
 Pearson Education, 254–55
 peat, 261
 Peichel, Katie, 294
 pellets, 6, 201
 Penaluna, Bill, 38
 Perahia, Murray, 128
 Percy, Freddie, 29
 Peregrín Casanova lecture, 215
 Peretó, Juli, 215
 permit, 73, 198, 235, 289
 Perrins, Chris, 137
 Perry, Roger, 259
 Persepolis, Iran, 102
 Persians, 102
 Peru, 174, 249, 297, 305
 pests, agricultural, 233, 268
 Peterson, Roger Tory, 54
 Pethica, John, 263
 Peto, Sir Richard, 188
 Petren, Ken, 154, 157, 195
 Pevsner, Nikolaus, 45–46, 103
 PhD, 50, 65, 78–79, 80, 93, 98, 106, 113, 116,
 124, 132, 136, 142, 202, 218, 247, 275
 Philippa, sister, 61
 Phillipson, John, 137
Philornis, 174
 Philosopher's Path, Kyoto, 189
 physics, 24, 25, 28, 190, 249, 278
 physiology, 41, 88, 229
 physiotherapy, 163, 250–51
 Picasso Museum, Barcelona, 207
 Piccadilly Circus, London, 14
 Pico de Teide, Canary Islands, 211
Pietà, by Michelangelo, 212
 pigs, feral, 268
Pikaia, 291
 Pimentel, David, 131
 Pimm, Stuart, 162
 pine trees, 33, 74, 147, 161–62, 183, 206, 248,
 261, 272, 283–84
Pirata, 1, 228
 pirates, 120, 151, 228
 pitcher plants, 147
 Pittsfield Drain, Ann Arbor, 128
Plague, The, 303–4
 planes, 12
 Plateau Point, Daphne Island, 293
 Playa Tortuga Negra, Isabela Island, 174
 playback, tape-recorded songs, 101, 105, 172,
 266, 290
 plenary lectures, 185, 208–09
 Plough at Fen Ditton, Cambridge, 281
 plumage, island birds, 218
 Plymouth, Devon, 31–32, 43
 poems, 208, 237–241, 251–53
 Point Lobos, California, 55–56
 Point Loma Nazarene University, 225
 police, 5, 54, 57, 70, 74, 76–77, 83, 102, 104,
 134, 145, 163
 pollination, 256
 pollution, atmospheric, 87, 88, 185, 285

SUBJECT INDEX 335

- Pomeroy, Derek, 31
- Pompeii, Italy, 244
- pope, 243
- population and community ecology, 64, 78, 81, 88–89, 97, 99, 100, 109, 113, 116, 132, 142, 144, 151, 227, 234
- population biology, 97, 131, 135–36, 147, 203; dynamics 64, 132, 196; genetics and evolution, 43, 129, 143–44, 154, 196, 232, 258; of lemmings, 133; of small and vulnerable, 170, 172, 174, 190, 194–95, 233, 257
- porcupine, 52
- porphyritic crystals, 132
- porridge, cooked oats, 107, 120, 228
- Portland, Oregon, 208–9, 294–95
- Porto, Portugal, 248
- Portulaca* (Purslane), 230
- Potala Palace, Lhasa, 186
- Potter, Frankie, 30
- pound (sterling), devaluation of, 105
- prayer wheel, 186
- predators, 45, 65, 69, 166, 219, 239, 265, 268, 271–72
- president, European Convention on Human Rights, 203
- presidential address, American Society of Naturalists, 169
- Price, Trevor, 116, 130, 192–93, 202
- priest, South Carolina, 161
- Prime, Cecil, 24–25
- Prince: Andrew, Duke of York, 278; Bernhard, Netherlands, 143–44; Philip, HRH, 143
- Prince Edward Island, Canada, 87, 90
- Princess Takamado, 223
- Princeton, New Jersey, 144–47, 169, 190, 206, 208, 225, 235, 251, 263, 277, 297, 301
- Princeton University, 11, 119, 135–37, 142–43, 147–48, 157, 164, 168, 182, 184, 187, 204, 210, 219–20, 226, 231, 235, 247, 250, 261, 279, 284, 294–95
- Prizes, received: Balzan, in Population Biology, 203, 209, 211, 243; BBVA Foundation, in Ecology and Conservation, 279–80, 284; Kyoto, in Basic Sciences, 219–26, 296
- professorship, Cambridge University, 138
- program, Cell and Molecular Biology, 147
- prolific, growth and breeding, 153, 156, 268
- proscenium, 245
- Prospect Avenue, Princeton, 169
- Prospect House, Princeton University, 209, 225–26, 296
- Protection Mountain Campground, 91
- Przewalski's horses, 299
- Public Broadcasting Service (PBS), 158
- public speaking, 167, 213
- Puerto Ayora, Santa Cruz Island, 109, 228, 231, 234
- Puerto Baquerizo Moreno, San Cristóbal Island, 181, 202–03, 289
- Puerto Vallarta, Mexico, 69–70, 73–76
- puli, Hungarian sheep dog, 299
- Punta Espinosa, Fernandina Island, 172
- Putin, Vladimir, 303
- pygmy marmoset, 236
- pyramid: Egyptian, 285; of Teotihuacán, 284–85
- Python Rock, Australia, 271–72
- quarantine, 254
- Queen's University, 275
- Quetzalcoatl (plumed serpent), 94, 298
- Quetzalpapálotl, 284–85
- Qin Shi Hwang, 186
- Quito, Ecuador, 180, 202, 235, 237
- quoll, 271
- raccoon, 99
- Rackham Concert Hall, University of Michigan, 128–29
- radio, 14, 104, 122, 266, 281
- Raphael, painter, 243
- railroad tracks, 129
- rain forest, 176–77, 235–37, 256, 259, 272–73
- Rajul, grandson, 15, 162, 226

- Ramakrishnan, Venki, Royal Society
 London president, 279
Rameiro, 235–40
Ramos, Margarita, 210
Ramsay, Dr., 50
Ratcliffe, Laurene, 2, 113, 115, 275
Rathbone, Peter, 8, 11
Ravi, son-in-law, 161–62, 221
ravioli, 105
Rawsthorne, John, 269
Reagan, Ronald, 159
Reck, Gunther, 143
Red Panda, 141
Redcord, method of physical therapy, 251
Reed, Charles, 81
Reed, Kate, valedictorian, 295
Repsol, oil company, 235
Resende, Robert, 218
retirement, 10, 138, 202, 241–42
Rettig, Neil, naturalist-photographer, 158
Reyer, Uli, 164, 183, 195, 218
Reykjavík, Iceland, 34–35, 216, 276
Rheinhardt, Django, 5
rhinos, 139
rhododendrons, 140
Rhône, Rhône Valley, 164, 246, 248
Ricklefs, Bob, 131, 255
Riewe, Rick and Jane, 90
Rigler, Frank, 94
Rio Genio, 176
ritual sacrifice, 285,
river dolphins, 236, 240, 306
Rivero, Ana and Sylvain, 247
Robert's Rules of Order, 87
rock art, 268
Rock Church, Helsinki, 132
rock paintings, 261, 269
rocket frog, 268
rockets, V-1 and V-2, 12
Rocky Mountain Biological Laboratory, 183
Rodriguez, Pedro, 218
Rome, Roman, 161, 242–43, 245, 247, 260,
 284
Rosas, Spain, 39
Rosemary, wife, 40, 62–63, 65–66, 70, 73–77,
 79, 83–84, 89, 92–93, 95–96, 103, 107–18,
 113–14, 121–22, 124, 130–39, 141–44, 151,
 155–58, 160, 162–63, 165–68, 170, 173–75,
 178, 182–85, 187–88, 192, 196–97, 199,
 203–15, 217–19, 221, 223, 225–26, 228, 235,
 241, 243, 246–47, 249, 251, 258–63, 265,
 269, 271–72, 274–77, 279–81, 284, 291–93,
 295, 297, 306
Rosenqvist, Gunilla, 137
Rossi, Marcello, 211
Rotarians, 266
round peg in a round hole, 266
Royal Academy of Arts, Burlington
 House, 205
Royal Clarence Hotel, Exeter, 260
Royal Institution, London, 24–25
Royal (Queen's) medal, premier award. *See*
 medals
Royal Society: of Canada, 188; of London,
 188, 205, 263, 277–79
Royal Swedish Academy of Sciences, 214
Rubenstein, Dan, chair of EEB Depart-
 ment, 135, 147, 209
Rubin, Calle (Carl), 289
running away, 5, 8, 251
Russian pavilion, Montreal Expo, 87
Rutgers University, 55, 153
Saariaho, Kaija, 280
sabbatical leave, 10, 94, 100, 113, 136–37, 242
saber-toothed tigers, 55
Sacks, Oliver, 7
Safari Lodge, Santa Cruz Island, 291
Safdie, Moshe, 134
Safran Rebecca, 294
Sai Baba, Indian spiritual leader, 161–62
Saint Augustine, 37
sal forest, 139
Sally Lightfoot crab, 120
Salmonella, 132
salp, colonial tunicate, 231

SUBJECT INDEX 337

- Salt Spring Island, British Columbia, 169
- Salt, George, 43
- saltbush, *Cryptocarpus*, 118
- San Blas, Mexico, 71
- San Diego, California, 221, 225
- San Francisco, California, 54
- San José, Costa Rica, 297
- Santa Barbara Mission, California, 55
- Santa Cruz Island, California, 295
- Santa Monica hills, 295
- Sao Miguel, Azores, 217
- Sao Paulo, Brazil, 305
- Saraakallio, Finland, 261
- Sarah, sister, and husband Alex, 10, 61, 161, 205, 281
- sarcophagi, 245
- SARS coronavirus-2, 302
- Sarukhan, Pepe and Adelaide, 284
- Saunders, Professor, 43
- Savegre/Cerro de la Muerte, Costa Rica, 297
- Savuti, Botswana, 165
- Scaffolding Great Britain (SGB), 61
- Schad, Bob, 26, 34
- Schluter, Dolph, 107, 117, 130, 202, 208
- Schnyder, Oliver, 219
- Schoener, Tom, 93
- School of Public and International Affairs, Princeton University, 209
- school teaching, 26, 29, 49, 94, 113, 119, 255
- Scudder, Geoff, 79
- sculpted arches, Alhambra, 249
- sculpture, Charles Darwin, 216
- Scutt, Mrs. Mabel, 7–9
- sea cucumber, 224
- sea lion, 120, 180, 199, 234
- Sea Otters, 55
- seabirds, 2, 120
- Searcy, Bill, 258
- seaweed, 224
- Selander, Robert, 81
- selection. *See* natural selection
- Selwyn College, Cambridge, 211, 216
- Seonunsa, South Korea, 284
- sequence of genes. *See* genes, genetic
- Serbia, 105
- Serralves Foundation, Portugal, 248
- Sesuvium*, 201, 292
- Seville, Spain, 40, 248–49
- sexual: imprinting, 133; selection, 112
- Seychelles, 227
- Sforza family, 212
- sharks, 158, 174, 199
- shark repellent, 199
- sheep: wild 103, 299; Bighorn 66, 206; dwarf, *Myotragus*, 217
- Sherrerd, Ann, Princeton Board of Trustees, 296
- Shin-Yakushiji, Japan, 189
- shingles, 131
- Shipley, Arthur, 83
- Shiraz, Iran, 102
- Shirley, Kent, 12
- shoguns, 224
- Shrewsbury, Shropshire, 38
- Sibley, Charles, 81
- sickle-cell anemia, 140
- Sierra Negra, eruption of, 213
- signaling molecule, 196
- Silent Spring*, 87
- Silmarillion, The*, 119
- silverswords, Hawaii, 256
- Sing Gompa, Nepal, 140
- Singh, Divia, 161
- singing bowl, 186
- skate, type of ray fish, 43, 50
- Skehel, John, 279
- skiing, 63, 65, 89–90, 133
- skin color, in chickens, 286
- skis, 62–63, 67
- skunks, 302
- Slapton Leys Field Station, Devon, 61
- sloth, two-toed, 236, 240
- Slovenia, 104
- Smith: Jamie, 95, 100, 108, 202; Lillian and Bill, 15; Michael, 131

- Smithsonian Institution, Washington, DC, 81, 176
- snakes, 9, 25, 59, 94, 209, 239, 265, 268, 298;
Anaconda, 236, 239; bushmaster, 236;
garter, 209
- snapping turtle, 143
- Snider Lecture, 274
- Snorrason, Sigurdur, 217
- Socavón, San Cristóbal Island, 290
- Social Security, 264
- Socrates, 202
- sodium lauryl sulfate, 199
- Soho, London, 30, 83
- soldier, Chinese, 187
- Solfataras, sulfur hot springs, 34–35
- song: bird, 52, 74, 101, 104, 115, 123, 125, 131, 144, 152, 155, 172, 179–81, 192, 194–95, 229, 232, 237–38, 271, 292, 310; people, 71, 187, 296
- Sous-bois* (Undergrowth), 246–47
- South Africa, 83, 165
- South Korea, 184–85, 281–84
- South Pacific, 199
- South Parks Road, Oxford, 137
- southern beech, *Nothofagus*, 272
- Southwood, Dick, 137, 139
- space shuttle, 297
- Spain, 36, 39–40, 47, 61, 214–15, 242, 246, 279, 281
- Spanish, 21, 39, 40, 58, 61, 69–71, 76, 217, 235, 253, 281, 284, 291, 296
- speciation, species formation, 111, 113, 116, 149, 152, 183, 194, 212, 232–34, 258, 294
- spitting cobra, 166
- sport, 16–17, 23, 26–27, 41, 49, 73, 161
- Squamish Highway, British Columbia, 53
- squid, giant axon of, 244
- squirrel, 55, 208
- St. Clair, Floyd, 55
- St. Ives, Cornwall, 33
- St. John's College, University of British Columbia, 206
- St. John's College, Cambridge, 259
- St. Lawrence River, 86
- St. Viator Rakusei High School, Kyoto, 221
- stalactites, 248
- stalagmites, 247–48
- standing ovation, 209, 260
- Stanford University, 299–300
- Stanley Park, Vancouver, 53
- Starbucks, 262
- stars, near the Trinquette Bridge, 247
- starvation, 216
- statues, 244–45
- Stazione Zoologica Nazionale Anton Dohrn, 244
- Ste. Anne de Bellevue, Quebec, 98–99
- Stemmer, Pim, 218
- Stenseth, Nils Christian, 132
- Stensoffa Field Station, Lund University, 133
- Stern, David, 164, 225
- Steven, David, 87
- Stevenson, Robert Louis, 256
- stickleback, 217
- Stilton cheese, 301
- Stockholm, Sweden, 47, 137, 214, 221
- Stoneleigh, near Epsom, Surrey, 5
- Stoppard, Tom, 119
- Stothard, Harry, 24
- strangler figs, 272
- Stuart, John McDouall, 270
- students, 30, 40, 44, 47–48, 52, 64–65, 69, 81, 87–90, 91, 98–99, 105, 113, 116–17, 124, 130–31, 133, 137, 147, 155, 164–65, 167, 172, 183, 185, 189, 202–4, 207, 209, 214–17, 219, 223, 225, 244, 247, 250, 255, 258–59, 266, 275–76, 284, 290, 295–96, 299, 302
- Study (private school), 85, 128
- Sty Head Pass, 139
- subtropical rainforest. *See* rain forest
- Suffolk, UK, 260
- Sunday Times*, 122
- sundews, 147
- survival, 144, 155, 231, 270, 287, 310
- Suzuki, Dr. Tohru, 224
- Svartárkot, Iceland, 35

SUBJECT INDEX 339

- Swan, Michael, 207
- Swanwick, Debyshire, 210
- Swarth, Harold, 112
- Sweden, 47, 131–32, 142, 164, 167, 192, 227, 286
- Swerve, The*, 241
- Swiss National Parliament, Berne, 203
- Switzerland, 31, 105, 164, 167, 184, 215, 242, 277
- Sydenham, London, 4
- symposium, 167, 189, 202, 204, 209–10, 214, 217–18, 221, 225, 245, 260, 276, 291, 299
- synthesis, 191, 235
- Székely, Tamas, 299
- Tabin, Cliff, 196
- tape-recording, bird song, 104, 125, 155, 172–73, 175, 179–81, 188, 190
- Tarn Hows, Cumbria, 139
- tarpaulin, 118
- tax, 59, 261, 264
- Taylor, Mark and Linda, 102
- teahouses, 140
- teachers' training program, 93
- teaching, 15, 24–27, 29, 31, 44, 49, 58, 61–62, 79, 83, 93–94, 113, 119, 128, 142, 183, 192, 202, 204, 215, 242, 244, 248, 255, 258
- Teatro Real, Madrid, 280
- Tehran, Iran, 101
- Templo Mayor, 187, 284
- tennis, 16–17, 20, 162
- tents, 3, 33–34, 91, 117–18, 150, 175, 178, 180, 200, 227–29, 267
- Tepic, Nayarit, 73–76
- Terborgh, John, 135, 142, 147
- Teredo*, marine mollusk, 119
- terminal moraine, 141
- termite mounds, 268
- Texas A&M University, 302
- Texcoco Lake, 285
- Thalia, daughter, 11, 85–86, 92, 104, 108, 114–15, 124–25, 127–28, 137, 161–62, 195, 206, 208, 231, 291–92
- theft, 14, 134, 177
- theological college, 212
- thesis, PhD, 66, 77, 79–80, 98, 106, 124, 137
- Thingvallavatn, Iceland, 216–217
- Thorpe, Bill, 43
- threadballs, Japanese, 223
- Tiber River, 243
- Tiberius, Roman Emperor, 246
- Tibet, 186–87
- Tiepolo, Gianbattista, painter, 178
- tigers, 55, 139
- Tinbergen, Niko, 100, 137
- Tinkle, Don, 80, 95
- Tiputini River, Ecuador, 235–37, 306
- toads, toxically immune, 268
- Tolkien, J. R. R., 119
- Tolly Nason's glass beaks, 216, 225
- tomb, terra-cotta warriors, 186–87
- Tompa, Frank, 64, 66, 75, 169
- Tömpste*, 133
- torchwood trees. *See Bursera*
- Toronto, Ontario, 52, 122, 209, 274–75
- tortoise, 120–21, 175, 178, 181
- Tour du Valat, France, 246
- tourists, tourism, 33, 39–40, 60, 69, 93, 102, 107, 120, 122, 170, 180, 198, 216, 234, 246, 249, 291
- transcription factors, 287
- Transvall Museum, Pretoria, 165
- trapper's hut, 206
- trees as prey, 272
- Tres Mariás Islands, Mexico, 64–65, 69, 72–73, 77, 105, 107, 218, 259. *See also* María
- Tribulus cistoides*, caltrop, 110, 115, 153, 195, 230
- Trier, France, 245
- Tristan und Isolde*, 211
- Triumph of Galatea*, 243
- Troikka Restaurant, 132
- tropical rain forest. *See* rain forest
- Trudeau, Pierre, 85–86
- Trump, Donald, 302–3
- Tryggvason, Hörthur, 35
- Tsukuba, Japan, 189
- Tucson, Arizona, 94
- Tudor dynasty, 259

- tuna, 107, 231
Tunisians, 245
Turku (Åbo), Finland, 132, 215
Turner, J. M. W., 30, 184
Twain, Mark, 264
twig, as tool, 257, 310
Tyrannus persicus, 102
Tyrrell Museum of Paleontology, 208
- Udvardy, Miklos (Nick), 64, 73–74, 79, 299
Ulfstrand, Staffan and Astrid, 131, 142, 164, 209
Uluru (Ayres Rock), Australia, 270
Uncle Vanya, 87
underground cable car, 247
United Nations, 60
Universidad Nacional Autónoma de México (UNAM), 70, 284
university colleges, London, 27
universities: Bath, 299; British Columbia (UBC), 53, 63, 78, 202, 306; California, Berkeley, 54, 306; California, Los Angeles (UCLA), 55; California, San Diego (UCSD), 225; California, Santa Cruz (UCSC), 137; Debrecen, 299; Edinburgh, 65; Granada, 249; La Laguna, 211; Manitoba, 90; Miami, 258; Michigan, 95, 113, 130; Minnesota, 167; Montana, 219; Ottawa, 213; Pennsylvania, 226; Reykjavík, 216; San Francisco, Quito (USFQ), 202, 235, 289; Southampton, 138; Southern California (USC), 55; Tennessee, 162; Toronto, 274–75; Wisconsin, 139; York, 138; Zürich, 164, 167, 184, 242
University Senate, McGill, 87
unpredictability, 57, 191, 198, 234, 297
Upper Norwood, London, 4
Uppsala, Sweden, 131–33, 136, 141, 160, 163, 165, 209, 247
Uppsala University 131, 142, 286
Uruguay, 297
- US Citizenship and Immigration Services, 261
US passports, 262–63
Uy, Al, 258
- Valencia, Spain, 214–15
Valle, Carlos, 172, 178, 203, 289
Van Gogh family, 246
Van Gogh, Vincent, 246–47
Van Gogh Foundation, 246
Van Heughten, Mr., art expert, 246
Vancouver, British Columbia, 52–53, 61–62, 66, 68, 73, 77, 145, 167, 188, 202, 206, 208, 273, 305
variation, 115, 123, 154, 286
Vasaskip Museum, Stockholm, 214
Vasdev, Surin, 277
Veeraswamy's Restaurant, 205
Venetians, 104
Venice, Italy, 242–44
Venter, Craig, 197, 218
Ventura, California, 294
Vesuvius eruption, 244
Victoria Falls, Zimbabwe, 165
videos on evolution, 230, 254, 266, 280
Vienna, Austria, 100, 167
Vienna Philharmonic Orchestra, 128
Vík í Mýrdal, Iceland, 216
Villamar, Simon, 175, 291
villas: Åsen, Uppsala, 136, 163; Farnesina, Rome, 243; *Marcelline*, Montreal, 85
vines, 153, 272, 298
violins, 5, 87, 118, 134, 219
Virginia, 59, 183, 305
viruses, 233, 302–4
visiting professor: Jesus College Oxford, 137–38; University of Miami, 258; Yale University, 257; University of Zürich, 183–84
visual and acoustic cues, 101
Vivaldi, Antonio, 243
Volcan Alcedo, Isabela Island. *See* Alcedo
volcanic tuff cone, 109

SUBJECT INDEX 341

- Volcanoes National Park, Hawaii, 167
- vole experiments, 90, 98–100, 109, 152
- Volvo, 94, 103, 136, 206
- Wadham College, Oxford, 215
- Waikamoi Nature Reserve, Hawaii, 256
- Waikiki Beach, Hawaii, 255
- wall paintings, Kakadu, 268–69, 285
- Wallace, A. R., 88, 212
- walking stick, czeki-leki, 197, 256
- Wantage, near Oxford, 100
- War Measures Act, 85–86
- Warren, David, British Ambassador, 223
- Wasdale, Cumbria, 139
- Washington Road, Princeton, 169
- Washington State, 54
- Washington, DC, 53, 60, 207, 213
- wasp sting, 6, 127
- water lilies, blue 269
- Water Moccasin (Cottonmouth), 59
- Watkins, Graham, 198
- Watmough, David, 55, 56
- Wayne, John, 248
- Webb, John, 27, 34
- Weiland, Jonathan, 149
- Weiner, Jonathan and Debbie, 116, 151, 157–58, 221, 307
- welcome mat, 292
- Welwitschia National Park, 165
- Werder, Suzanne, 211
- Werner, Earl, 131
- Westmount, Montreal, 85
- Weston, Sir John and Lady Sally, 11
- wet sclerophyll (eucalypt) forest, 272
- whaling station, 276
- Whitgift School, 21–22, 25–29, 34, 37, 44, 50, 82, 276
- Whitney Avenue, New Haven, 81, 257–58
- Whittingham, Charles, 44
- Wyhe John van, 216
- Whyte, Charles, 27
- Whytham, Oxford, 138
- Wigglesworth, Vincent, 41
- Wikelski, Martin, 175
- Wikipedia, 277
- wildebeest, 166
- wilderness, 52, 90, 107, 178
- Wiles, Andrew, 279
- Williams, George, 131
- Wilson: Ed., 59, 135, 167, 231; Michael, 275; Ron and Birthe, 47, 52
- Winchester, UK, 139, 161
- wine, 60, 163, 182, 197, 211, 225, 231, 259, 281, 301
- Winton House School, 16
- Wistman Woods, Dartmoor, 32, 224
- Wittmers, 269
- woman with no legs, 122
- woodland mouse, *Peromyscus maniculatus*, 99
- Woodstock Road, Oxford, 137
- World Health Organization, 304
- World Scientists’ Warning to Humanity, 88
- World Summit on Evolution, 202–3
- World War II, 5, 44, 47, 305–6
- Wray, Norman, and wife, 291
- Wright, Sewall, 129–130
- Wuhan, China, 302
- Xi’an, 186
- Xiangbala Hotel, Lhasa, 186
- Y2K problem, 169
- Yaeger, Lewis and Michaela, 74
- Yale University, 28, 61, 79, 81, 87, 98, 135–36, 198, 257–58, 280
- Yasuni Nature Reserve, Ecuador, 236–37
- yellow café, Place du Forum, 247
- Yeti Hotel at Syaburu, Nepal, 140
- YMCA, 54, 57, 60
- Young, J. Z., 244; Mike, 44, 281
- youth hostel, 38, 48, 54, 131
- YouTube, 254
- Yugoslavia, 104–5
- Yumoto, Takakazu, 189

342 SUBJECT INDEX

- Z chromosome, 289
Zanthoxylum, cat's-claw, 175
zebras, 166
Zelkova serrata, 283
Ziegler, Stefan, 140
Zinal, Switzerland, 105
zither, 185
Zodiac (*panga*), 1, 173
zoology, 24, 41, 43, 45, 49, 62, 83, 129
zoology departments: Cambridge, 49, 165, 216, 259, 299; McGill, 87; Oxford, 137; Natural History Museum, London, 138; UBC, 53, 64–65, 69; Uppsala, 163
Zorba the Greek, 104
Zürichberg, 184

BIRD INDEX

- Accentor, Alpine, 141
 Albatross, 199
 Anhinga, 59, 259
 Antbird, 238
Apapane, 256

 Barbet, 238
 Bee-eater, Rainbow, 266
 Bird of Paradise, 93, 267
 Blackbird, Common, 9
 Bluebird, Eastern, 301
 Boobies, 2, 125
 Booby, Blue-footed, 292
 Booby, Brown (*Sula leucogaster*), 72
 Booby, Red-footed, 201
 Bowerbird, 93, 272
 Bowerbird, Great, 269
 Bullfinch, Antilles, 205
 Bullfinch (*Priolo*), Azores, 218
 Bustard, Greater, 299
 Buzzard, Common, 299

 Cacique, Yellow-rumped, 238
 Cardinal, Red-capped, 238
 Chaffinch, Common, 218
 Chaffinch, Tenerife Blue, 211
 Chickadee, Black-capped, 64
 Chickadee, Rufous-capped, 64
 Condor, Andean, 164
 Cormorant, Galápagos Flightless, 50, 172–73
 Corn Crake, 163–164
 Cotingid, 238
 Crane, 299
 Crane, Sandhill, 302
 Crane, Whooping, 302
 Creeper, Maui; *alauahio*, 256
 Crow, 225, 272
 Cuckoo, 176
 Currasow, Salvin's, 236, 239

 Darwin's finches
 Big Bird lineage, 192–95, 218, 229,
 231, 288–89, 292, 310–11
 Cocos Finch, *Pinaroloxias inornata*,
 176
 Common Cactus Finch, *Geospiza*
 scandens, 3, 109–10, 124, 151–52,
 154, 172, 194, 228–29, 231–32,
 289–90, 292
 Española Large Cactus Finch,
 Geospiza conirostris, 192, 288
 Genovesa Cactus Finch, *Geospiza*
 propinqua, 123–124
 Genovesa Sharp-beaked Ground
 Finch, *Geospiza acutirostris*, 124
 G. fortis: see Medium Ground Finch
 G. magnirostris: see Large Ground
 Finch
 G. scandens: see Common Cactus
 Finch
 Hybrid *G. fortis* x *G. scandens*, 151,
 288
 Large Ground Finch, *Geospiza*
 magnirostris, 110, 124, 151, 173,
 194–95, 225, 229–30, 232, 288,
 290, 292

- Darwin's finches (*Continued*)
- Mangrove Finch, *Camarhynchus heliobates*, 172, 174, 180
 - Medium Ground Finch, *Geospiza fortis*, 109–10, 113, 115, 151, 154, 192–95, 228–29, 231–32, 287–89, 292,
 - Northern Sharp-beaked Ground finch, *Geospiza septentrionalis*, 125, 173–74
 - Sharp-beaked Ground Finch, *Geospiza difficilis*, 173–75, 177
 - Small Ground Finch, *Geospiza fuliginosa*, 109, 151
 - Vampire Ground finch; see also *Geospiza septentrionalis*, 125
 - Vegetarian Finch, *Platyspiza crassirostris*, 290
 - Warbler Finches, *Certhidea fusca* and *C. olivacea*, 178–81
 - Woodpecker Finch, *Camarhynchus pallidus*, 257
- Dove, Galápagos, 124
- Eagle, 224
- Eagle, Bald, 219
- Eagle, Bonelli's, 246
- Eagle, Crested, 236, 238
- Euphonia, 238
- Falcon, 240
- Falcon, Peregrine, 201
- Finch, Double-barred, 266
- Finch, Gouldian, 269
- Flamingo, 181
- Flycatcher, 47, 176, 269
- Flycatcher, European Pied, 130, 227
- Flycatcher, *Myiarchus*, 201
- Frigatebird, Greater, 156, 292
- Frigatebird, Magnificent, 156, 292
- Frogmouth, Tawny, 269
- Fulmar, Northern, 277
- Goose, Snow, 147
- Goshawk, 224
- Greenfinch, European, 18, 33, 44
- Grouse, Black, 133
- Grouse, Blue, 24
- Guan, Piping 236, 239
- Guan's, Spix's, 239
- Guillemot, Common, 277
- Guillemot, Brünnich's, 277
- Gulls, 2
- Gull, Ivory, 277
- Gull, Lava, 120, 228
- Gull, Swallowtail, 120
- Gyr Falcon, 34, 216
- Hawk, 237
- Hawk, Galápagos, 120–21, 180
- Heron, 59, 219
- Heron, Lava, 120
- Hoatzin, 236–240
- Honeycreepers, 256, 266, 269
- Honeycreeper, Crested: *akahoekohe*, 256–57
- Hummingbirds, 75, 298
- Hummingbird, Sword-billed, 210
- Ibis, 266
- Iiwi, 256
- Jacamar, 238
- Jackdaw, 136
- Jay, 238
- Jay, Green, 302
- Junco, Volcano, 298
- Junglefowl, 139
- Kakapo, 50, 164
- Kingfisher, 93, 265
- Kite, Black, 225, 266
- Kite, Swallow-tailed, 238
- Kookaburra, Blue-winged, 265, 269
- Lapwing, Masked, 266
- Limpkin, 59
- Linnet, Common, 31, 44, 103

- Logrunner, 265, 271
 Lyrebird, 265, 271
- Macaw, Scarlet (*Ara macao*), 238–39
 Magpie-lark, 266
 Manakin, 236
 Manakin, Pygmy, 238
 Martin, 176
 Meadowlark, 52
 Megapode, 266
 Merganser, Common, 301
 Minivet, 141
 Mockingbird, Galápagos, 124, 290
 Myna, Common, 255
- Night Heron, Yellow-crowned, 120
 Nightjar, 269
 Nunbird, 238
 Nuthatches, Rock, 100–01
- Oropendola, Green, 238
 Osprey, 266
 Owl, Great Gray, 261
 Owl, Short-eared, 35
 Owl, Ural, 261
- Parrot, 50, 75, 238
 Parrot, *Pionites melanocephala*, 239
 Parrot, Yellow-headed; *Amazona ochrocephala*, 75, 239
 Parrotbill, Maui; *kiwikiu*, 256–57
 Peacock and Peahen, 139
 Pelican, 200
 Penguin, 172, 181
 Petrel, Hawaiian, 175
 Pigeon, Plumbeous, 237
 Pintail duck, Galápagos, 120
 Pitta, 273
 Pitta, Rainbow, 267, 270
 Plover, Eurasian Golden, 35, 277
 Potoo, 270
 Ptarmigan, Common, 35, 277
 Puffbird, 238
 Puffin, Common, 216, 277
- Quail, Common, 30–31
 Quelea, 255
 Quetzal, Resplendent, 298
- Raven, Common, 188,
 Razorbill, 277
 Rhea, Greater, 111
 Rhea, Lesser, 111
 Riflebird, Paradise, 271
 Ring Ouzel, 17
 Roadrunner, Greater, 55, 302
 Robin, European, 51, 267
 Rosella, 272
- Sandpiper, Purple, 31
 Serin, 183
 Shrike, Great Gray, 30
 Skimmer, Black, 147
 Snipe, Common, 163
 Solitaire, Brown-backed, 71, 74
 Sparrow, 80, 272
 Sparrow, Song, 66, 227
 Spoonbill, Roseate, 302
 Starling, 255, 272
 Stone-curlew, Bush, 266
 Swallow, 9
 Swift, 38, 237
- Tanager, 205, 234
 Tanager, Paradise, 238
 Teal, Blue-Winged, 64
 Teal, Cinnamon, 64
 Tern, Fairy, 255
 Thrush Nightingale, 163
 Thrush, Clay-Colored, 302
 Thrush, Song, 9
 Tinamou, 237
 Tit, Great, 131
 Toucan, 236–37
 Tropicbirds, 2
 Twite, 31
- Vulture, Bearded, 248
 Vulture, Egyptian, 248

- | | |
|-------------------------------------|--------------------------|
| Vulture, European Black, 248 | Warbler, River, 163 |
| Vulture, Griffons, 248 | Warbler, Seychelles, 227 |
| | Waterbirds, 66, 147, 258 |
| Wagtail, Japanese, 225 | Whimbrel, Eurasian, 35 |
| Wallcreeper, 164 | Whinchat, 261 |
| Warblers, 47, 161 | Whipbird, 265, 271 |
| Warbler, Blue-winged, 256 | Wood Quail, Spotted, 298 |
| Warbler, Common Grasshopper,
163 | Woodcreeper, 237 |
| | Wren, 238, 298 |