INDEX

A
actinomycetes 95, 99, 137
activated sludge 56, 57
acute gastrointestinal illness 44
Africa 168
Alexander, Ron 70
American Cancer Society 121
Aminocyclopyrachlor 106
Aminopyralid 106
ammonia 135
anaerobic processes 72, 78, 83, 119, 197-198
An Agricultural Testament 74
animal mortalities 110-111, 119
anthracnose 108
antibiotic resistant bacteria 21, 23, 67
antibiotics 21, 99
avoidance of 26
and babies 22
consumption in U.S. 21
in manure 118
in milk 22
overuse of 22
production by microbes 99
Arquette, Patricia 252
artificial wetlands 63
Ascariasis 155
Ascaris 78, 155, 182, 185, 191, 202-203, 244
Asia
and compost 163-166
Aspergillus fumigatus 130
Association of American Plant Food Control Officials 70
asthma 24, 25
Australia 9
autism 24

B
Bacillus stearothermophilus 27, 98
bacteria 181
antibiotic resistance 21, 23, 67
pathogens in feces 180
survival in soil 189
and wind uplift 30
Bacteroides fragilis 24
Bavaria 38
BBC 268
beef tapeworm 66
Beijing 43
bioaerosols 130, 132
bio-dynamic 172
biofilms 83
biofilter 89, 106-107
Biolet 167
biological sponge 111, 227-228
biological toilets 70, 144, 146-147
biome 11
biopesticides 110
biosolids 56, 115-117
Bosun 167
birth canal 25
Black Death 37
Bovine Spongiform Encephalopathy 198
browns 89
bucket toilet 156, 242-245
Buttermilk Bay 52

C
calomel 16, 18
Cape Town, South Africa 159
carbon nitrogen ratios 85, 86
Carousel 167
Catholic 39
cat litter 251
CCA lumber 89, 138
C. diff. 24
celiac disease 24
Centers for Disease Control and Prevention 25
cesium 104-105
cesspools 149, 151
chemical fertilizers 265
chemotherapy drugs 121
Chernobyl 104
Chesapeake Bay 52
Chinese 33, 34, 35
agriculture 74
composting 163-164
nitrogen fertilizer 43
sewage waste 43
water pollution 43
chloramines 62
chlorine 60, 104, 225, 251
cholera 16-18, 37, 41, 149
Cholera Asiatica 151
Christianity 37
chromated copper arsenate 89
Clivus Multrum 167-168
Clopyralid 106
Clostridium difficile 26
C/N ratios 85, 86, 88
CO2 209
coffee 251
colon 25
commabacilli 17
commercial dry toilets 166
Complete Book of Composting 85
compost 69
aging 93
benefits 80
bins 81, 224-234, 251
bioaerosols 130, 132
biodiversity 98-99
biofilter 89, 106
Class A 198
contained 82
covering 84, 228
curing 93, 229
definition 69-70
emissions 130-132
frozen 239
fungi in 104

compost (cont.)
  heavy metals in 122
  house 73
  immature 93
  inoculants 133
  leaching 82
  management 236
  maturing 93
  microorganisms 94
  miracles 103
  moisture 79, 81, 82
  neglected 192
  nitrogen loss 86, 88
  odor control 89, 106, 132, 250
  oxygen in 129
  pathogen elimination in 96-101, 196, 199, 204-206
  pathogen transmission 196, 197
  pH 135-136
  phases 91-93
  pits 72, 73, 74, 75, 77, 78
  plant disease suppression 108-109
  safety zone 204
  tea 109
  toilet 196, 218-219
    build one 220-221
  turning 77, 125-132
  turning machine 78
  U.S. army 76
  weed seeds 110
  what not to 136
  windrows 81
  workers 131
composting
  antibiotics 118
  batch 91
  beer 83
  CCA lumber 138
  class A 199
  cold climates 132, 239
  continuous 91
  creosote 138
  dead animals 110, 119
  EPA requirements 199
  fats 137
  graywater 83
  grease 137
  junk mail 113
composting (cont.)
  legalities 248
  lipids 137
  manures 265
  monitoring temperature 238
  newspaper 113-114
  pathogen elimination in 198
  pet manures 112-113
  pharmaceuticals 114-122
  safety zone 204
  in small containers 145
  urine 120
  composting latrines 73
  Compost Science and Utilization 73
  compost tea 109
  compost toilet 84, 139, 147, 195, 217-225
  build one 220-221
  composting toilets 70, 142, 147
  constructed wetlands 63
  Cornell 37, 67, 130, 132
  cover materials 84, 106, 215-217, 228
  Crapper, Thomas 49
  creosote 138
  Crohn’s disease 24
  C-section 25
  cyanobacteria 28
D
  DDT 62, 64
  Delhi 44
  Delft, Holland 15
  Detroit Board of Health 72
  diabetes 24
  diapers 204
  dioxin 61
  disposable diapers 89
  dog manure 113, 251
  Double Vault 164, 243-244
  Dow AgroSciences 106
  drugs in water 115
  dry earth system 152
  dry toilets 70, 73, 139, 144, 146, 147, 164,
  166-168, 196
  pathogen transmission 196-197
  dust storms 30
  dysentery 19
E
  earth closet 148, 151, 153, 158, 203
  earthworms 101, 124
  E. coli 21, 23, 92, 99, 186, 191
  electromagnetism 270
  England 40
  Envirolet 167
  EPA pathogen elimination 198, 206
  epidemic 16, 40
  Europe, hygiene in 37
  excreta
    nutrients in 35
    average daily 35
F
  Farmers of Forty Centuries 34, 72, 73
  fecal coliforms 186
  average density excreted 182
  survival times in soil 182
  fecal microbiota transplantation 26
  fecaphobia 162
  feces
    bacterial pathogens in 180
    protozoal pathogens in 182
    viral pathogens in 180
    worm pathogens in 183
    fermentation 72
    fertilizers, chemical 265
    Finger Lakes 160
    Flatt, Hugh 244
    Fleming, Alexander 21
    flies 256-257
    flood plain 251
    flush toilet 149
    food allergies 24
food waste 262
fungi 11, 94, 95
Fusarium 110

G
Geobacillus 27, 98
Germany 39, 193
germ theory 18
Gibson, Dr. T. 240
Gilgit Agency 81, 176
GiveLove.org 224, 252
gluten intolerance 24
Gotaas, Harold B. 141
Great Lakes 56
greenhouse gas emissions 58
greens 89
gross national product 35
Guatemalan dry toilet 166

H
Haiti 224, 251, 252
Hamlet 71
heavy metals 63-65, 113, 122-124
helminths 78, 182, 198
egg death 191
in feces 183
 survival times 191
hepatitis A 43
hepatitis B 177
herbicide 103
 persistent 106
History Channel 269
HIV 198
hookworms 182, 190, 200-201
Hopei 164
horizontal gene transfer 23
Howard, Sir Albert 74, 81, 83, 126, 134, 175
Huangpu River 43
human nutrient cycle 207-208
humanure agronutrients in 160
composition of 87
global production 160
humanure hacienda 232-233
humus 32, 69
Hunzas 81, 174-176
India 44, 81, 187
tea estates 77
Indian River Lagoon 52
indicator pathogens 184
Indore process 74, 75, 77, 126, 134
inflammatory bowel disease 24
inoculants 133
insecticide 103
jail fever 37, 39
Japan 41
Jenkins’s three rules of sanitation 155
Jews 38
junk mail 113
K
Keesey, Alisa 252
King, Dr. F. H. 34, 72, 73, 256
King Minos 49
Koch, Robert 17
Korea 47
Kyoto, Japan 41
laclobacillus 25
lagoons 60, 195
landfills 262-263
Larry the Cable Guy 269
leachate 234
leach field 52-53
Leeuwenhoek, Antony 15-16
legalities 248
lime 134
Long Island 52
loo: see compost toilet
Lubke, Siegfried 104
lupus 24
Mad Cow Disease 198
magnetism 269
magnetite 269
magnetosomes 269
manure, comparison of 87
medical errors 24
medications in water 115
menstrual pads 90
mercury 16
mesophiles 27, 30, 92
Mexico 47, 165
methane 263
micro-arthropods 108
microbes 8
 aerobic 69
 in compost 94
 in history 18
 in our body
 in sea water 10
3.5-billion-year-old 9
on your hand 13
in your mouth 11
microbial biodiversity 98-99
microbiome 11, 24
microbiota 24
Milan 39
minimal infective doses 178
Miquel 28
Mongolia 226, 267
Moule, Reverend Henry 152
Mozambique 218
municipal solid waste 122, 209, 261-262
Nano-Toilet 140
National Geographic 73
Native Americans 39
New England 39
newspaper 113
Nicaragua 224, 267
Niger 44
night soil 33, 35, 41, 78, 179
nitrogen loss 135
Nobel Prize 21
nonillion 9
Nova Scotia 133

O
obesity 24, 25
open defecation 47, 139
opium 71
organic agriculture 74
Organic Gardening 125
organic material 79
organochlorines 62
osteoporosis 24
outhouses 193
oxidation ponds 60

P
PAHs (polycyclic aromatic hydrocarbons) 118
pail privy 157
pail toilet 156
Pakistan 175
parasites 155
pathogens 176
elimination 96-101
elimination in compost 198
indicator 184
persistence
in soil 187
on vegetables 191
safety zone 204
survival in composting or soil 199
survival in sludge, feces, and urine 192
survival on crops 191
thermal death points 199
transmission through:
compost toilets 195
dry toilets 195
outhouses and latrines 193
septic tanks 193
sewage plants 195
toilet systems 192
waste stabilization ponds 195
PCBs (polychlorinated biphenyls) 62, 64, 105
penicillin 21, 24, 67
persistent herbicide 106
pet manure 112
petroleum hydrocarbons 103
pH 134-136, 237
pharmaceuticals 114-122
degradation in soils 117
phases of compost 91-93
Phoenix 167
phytoplankton 13
phytotoxins 93
Picolaram 106
pinworms 200
pit latrine 48, 142, 143, 193, 219, 251
plants
diseases 108
drug uptake in 120-121
plague 37
Plymouth Colony 39
poliovirus 181, 189, 191
survival in soil 189
polychlorinated biphenyls (PCBs) 62, 64, 105
polycyclic aromatic hydrocarbons (PAHs) 118
Pope Innocent VIII 38
Pope of Poop 31
pressure treated lumber 89
Prince Albert 40
prions 198
priority pathogens 23
prison 219
privy 143, 157
Prochlorococcus 13
Protestant 39
protozoa 11, 181, 191
survival in soil 188
psychrophiles 27
public health bill 40, 41
Puerto Rico 202
Pythium root rot 108
Queen Victoria 40
Quintana Roo 47

R
reflux disease 24
river pollution 58-59
Rodale 85, 125, 134
roundworms 155, 182, 190, 202-203
Royal Demolition Explosives 105
Royal Society 16

S
Salmonella 24, 66, 98-99, 181
sand mound 51
Sanitary Fertilizer Company 148
sanitary napkins 89
sanitation 141
improved 142
Santa Monica Bay 264
Satan 38
sawdust 87, 88
Scharff, Dr. J. W. 78
septage 51, 144, 145, 195, 198
septic systems 49, 51
chemicals in 52
failure rates 52
septic tank 53, 194, 195
sewage plant 54, 195
sewage sludge 56, 115-116
agricultural use 64
composted 65, 198-199
contaminants in 115-116
farming 262
forest application 67
Shakespeare 71
Shang Dynasty 33
Shanghai 35, 43
Shantung 164
Sisters of Humility 31
Skaneateles Lake 161
Slippery Rock Univ. 1
Snow, John 17
soil 33
bacteria populations in