

INDEX

Editors Virginia Barlow, Dave Mance III, and Patrick White have contributed some stories that are not cited. Cited works are included in this index. Artwork and charts are noted with the page number in italics.

A

Abbott, Susan, *front cover*
 Abenaki food systems, 224–225
 Abenaki traditions, 242, 274–275
 Ackert, Merle “Chick,” Jr. (1931–2012), 210–211
 Act 148, Universal Recycling Law, Vermont, 232–233, 236–237
 Aebi, Tania, 282–285
 Agricola Farm, 158–160
 agricultural distress factors, honey bee, 282–285, 286
 agricultural education, 154–155
 agricultural fairs, 250–253
 albino chipmunks, 194
 Allard Lumber, 93
 Ames Hill Orchard, 26–28
 anthocyanins (red leaf pigment), 16
 antlers, deer, 38
 apitherapy (bee sting venom), 282–285
 apples
 evolution of industry, 24–25
 home orchards, 31
 migrant workforce, 29
 peak maturation, 26–28
 tree pruning, 128–129
April (reflections), 146
 arctic amplification, receding ice, 101, 193
 army worm invasion, 22–23
 Asian long-horned beetle, 269
Atwater’s Vermont Directory, 89
August (reflections), 242
 Ayers Brook Goat Dairy, 156–157

B

balsamic vinegar, apple, 30
 balsam wreath making, 64–65
 barbeque wood smoke flavors (recipes), 200
 Barlow, Virginia, 17, 30, 85, 124, 149, 254–255, 280–281, 286
 barred owls, 102–103
 Bascom Family Farm, 137
 Baxter, Megan, 206–209
 bear diet, raiding food sources, 61
 bear grease uses (recipes), 270–271
 beaver beetle (*Platypus castoris*), 60
 beavers, tree felling by, 125
 beech bark disease, 149
 beef farming, 161–163
 beekeeping, 276–277, 280–281, 282–285, 286
 beetles, whirligig, 245
 Bellerose, George, 111, 130–131
 Berry Creek Farm, 259
 biodiversity, forest, 40–41
 bird diet, 83
 birds
 barred owls, 102–103
 blue jays, signaling motions, 125
 butcher birds, 39
 cormorants on Lake Champlain (*July* reflections), 216

diet, 83
 fall migration, 268–269
 kingfishers, 82
 northern shrikes, 39
 passenger pigeons, 22–23
 pigeon slaughter of 1760, 22–23
 turkey feathers, 170–171
 Vermont eBird (Vermont Atlas of Life, website), 39
 wild turkey (recipes), 176–177
 black ice, 60
 blue jays, signaling motions, 125
 bog elfins, butterfly (*Callophrys lanoraieensis*), 172–173
 Bomb Cyclone, 15
 Boston, Clarence Elijah, “Chief,” III, 26–28
 Bowen, Kate, 84–85, 150
 braconid wasps, tobacco hornworm parasitoid (*Cotesia congregata*), 269
 Bradshaw, Terence, 24–25
 Bresee, Albert, Early Rose potato, 228–230
 broad-leaved helleborine (*Epipactis helleborine*), 218–219
 brook trout, 268
 brown elfins, butterfly (*Callophrys augustinus*), 172–173
 brush hogging, how to, 246–247
 BTUs (British Thermal Units) per cord, firewood, 21
 buckwheat cover crop, 218
 bug spray, homemade (recipes), 150
 burdock root (recipes), 16
 butcher birds, 39

C

C4 photosynthesis, 245
 Carroll, David, 197
 Casella, Inc., 235
 CBD oil (cannabidiol), 48, 50–53
 Cedar Circle Farm, 222–223
 chainsaw sharpening, 86–87
 charcoal foundries, 46–47
 charcoal making process, 199
 Chaves, Judy, 80
 cherry gum (cherry trees, gummosis), 83
 chipmunks, albino, 194
 Christmas tree cultivation, 66–67, 68–69, 70–73, 174
 cider vinegar, 30
 Clearbrook Farm, 259
 Clery, Zaka, and Mandl–Abramson, Jette, 254–255
 climate change
 arctic amplification, receding ice, 101, 193
 biomass solutions, 245
 ecological awareness of impact, 17, 194, 195
 extreme weather, 15, 37
 USDA plant hardiness zone changes, 177
 colliers (charcoal producers), 46–47
 comet NEOWISE, 217

composting

benefits, 232–233
 CSA integration (Community Supported Agriculture), 234
 home-based systems, 236–237
 large-scale markets, 235
 perfluorooctanoic acid (PFOA), contamination, 235
 ratios and timing, 231
 Universal Recycling Law, Vermont (Act 148), 232–233, 236–237
 cooking. *see* recipes
 Coombs, Arnold, 137
 cormorants on Lake Champlain (*July* reflections), 216
 corn, Koasek, 224–225
 county and consulting foresters, 94
 cover crop, buckwheat, 218
 Covid-19 pandemic, business impact
 dairy, 112–113, 117
 farms and gardens, 184–185, 236–237, 258–261
 lumber, 90–91
 outdoor activities, 226–227, 247
 Covid-19 pandemic, reflections, 172–173, 180, 192, 216, 242, 266
 Cowart, Meredith, 186–187
 coyote reproduction, 82
 crop tree release, 248–249
 Crozier, Rosemary and Gerald, 259
 CSA (Community Supported Agriculture), economic factors, 256–257
 Czaplinski, Richard, 18

D

dairy industry
 Covid-19 impact, 112–113, 117
 evolution of, 110–111
 migrant workforce, 114–115
 Pill, Carrie (painting), 117
 State of Vermont initiatives, 111
 Thomas Dairy, 117
 Vermont Dairy Producers Alliance, 112–113
 Darby, Heather, 48–49
 Davis, Tammy, 122
December (reflections), 58
 deer
 antlers, 38
 deer season statistics (2019), 45
 forest encounters with (*November* reflections), 36
 rumen, 103
 venison (recipes), 42–44
 DeFriez, Nick (monthly paintings), 12, 34, 56, 78, 98, 120, 144, 166, 190, 214, 240, 264
 Devereux, Cam and Karen, 50–53
 “doodlebug” (Hook), 274–275
 Dow, Judy, 242
 Duarte, Natasha, 232–233
 Duffy, Owen, 226–227

E

Early Rose potato, history, 228–230
 earwig deterrent, 219
 eBird, Vermont (Vermont Atlas of Life website), 39
 Elwell, Christopher M., 248–249
 Evening Song Farm, 258
 evergreen wood fern, harvest, 210–211
Exidiopsis effusa (fungus), 39

F

fairs, agricultural, 250–253
 fall migration, birds, 268–269
 false morel mushrooms (*Gyromitra* spp., *Verpa* spp.), 171
 Fantelli, Lisa, 181
Farm Girl excerpt (Baxter memoir), 206–209
 farming practices (traditional), household food provisioning, 274–275
 farming systems, 161–163
 farms and markets, produce (vegetables), 258–261
February (reflections), 100
 fern, evergreen wood, harvest (*Dryopteris intermedia*), 210–211
 fern photosynthesis, 17
 firewood, 20–21
 fish, 244, 268
 fisher (animal), 103, 108–109
 fishing, 226–227
 Fitzbeauchamp, Kara and Ryan, 258
 flyfishing report (2020), 226–227
 foliage pigmentation, 16
 forests
 biodiversity, 40–41
 county & consulting foresters, 94
 crop tree release, 248–249
 financial investment-driven practices, 248–249
 stewardship, 186–187
 timber value, 92–95
 tree stump growth, 40–41
 woodland cultivation, 186–187
 wood products, 90–91
 see also trees
Forty-six Years of Pretty Straight Going (Bellerose), 111
 foundries (charcoal), 46–47
 4 Corners Farm, 260
 Frederick, Paul, 90–91
 frost formation, 39, 273
 full moon, 60

G

Game Wardens, (Vermont), annual trends, 247
 gardening, frost impact, 273
 geological formations, 269
 goat farming, 156–157
 Gokee, Amanda, 224–225
 Goodling, Kim, 152–153
 Gray, Bob and Kim, 260
 growth rings, trees, 195
Gyromitra spp. mushrooms (false morels), 171

H

Haley, Carolyn, 196–197, 198
 Hardy, Thomas, 180
 Hartland Farmer's Market, 260
 harvest, fall larder, 18–19, 274–275

Haskins, Greg, 95
Hay-cutters (poem), 204–205
 haying operations, 201–203
 Haystack Farmstead, 161–163
 heating degree days, 37
 helleborine, broad-leaved (*Epipactis helleborine*), pollination, 218–219
 Heller, Paul, 22–23, 88–89, 108–109, 228–230
 hemlock woolly adelgid, mortality rates of, 125
 hemp cultivation, 48–49, 181
 Hewitt, Ben, 146
 High Mowing Seeds, 182–185
 Hill, Roger, weather observations, 37, 59, 81, 101, 123, 147, 169, 193, 217, 243, 267
 Hochstetler, Neil, 30
 Holland, Mary, 61, 83, 102–103, 125
 honey, baking with (recipes), 278–279
 honey bees, 276–277, 280–281, 282–285, 286
 Honey Field Farm, 261
 Hook, Chief Shirly, 225, 274–275
 hornworm caterpillars, tobacco (*Manduca septa*), 269
 Horst, Jim, 68–69
 household food provisioning, traditional practices, 274–275
 Hunter, Anne (illustration), 62

I

insects
 apitherapy (bee sting venom), 282–285
 army worm invasion, 22–23
 Asian long-horned beetle, 269
 beaver beetle (*Platypyllus castoris*), 60
 bog elfins, butterfly, (*Callophrys lanoraieensis*), 172–173
 braconid wasps, tobacco hornworm parasitoid (*Cotesia congregata*), 269
 brown elfins, butterfly (*Callophrys augustinus*), 172–173
 bug spray, homemade, 150
 earwig deterrent, 219
 hemlock woolly adelgids, mortality rates of, 125
 honey bees, 276–277, 280–281, 282–285, 286
 neonicotinoid (insecticide), 282–285
 parasitic yellow grubs (*Clinostomum marginatum*), 244
 pear thrips, 170
 tobacco hornworm caterpillars (*Manduca septa*), 269
 webworm webs (moths), 245
 whirligig beetles, 245
 Isselhardt, Mark, 132–133, 134–136, 138–139, 149

J

January (reflections), 80
 Johnson, Charles W., 58
July (reflections), 216
June (reflections), 192

K

Killington ground fire, 267
 kingfishers (bird), 82
 Kinsey, Leland (1950–2016), 106
 Knafel, Andrew, 259
 Koasek corn, 224–225
 Koasek Tradition Band of Abenaki, 224–225
 Kolb, Kathleen (painting), 86
 Kramer, Kathryn, 114–115

L

Lea, Sydney, 192
 Leach, Brian and Brea, 161–163
 leaf pigmentation, 16
Leeks (poem), 63
 Levin, Ted, 268–269
 lichen, tree lungwort (*Lobaria pulmonaria*), 148
 log drives (river), history, 130–131
 log prices, 92–95
 lungwort lichen, tree (*Lobaria pulmonaria*), 148
 Luskin, Deborah Lee, 36

M

Mance, Dave, III, 14, 42–44, 74–75, 92–95, 100, 126–127, 148–149, 154–155, 176–177, 199, 201–203
 Mance, Trevor, 235
 Mandl-Abramson, Jette, and Clery, Zaka, 254–255
 maple syrup industry. *see* sugarmaking
 maple syrup treats (recipes), 127
March (reflections), 122
 Martin, Dave, 156–157
May (reflections), 168
 McFarland, Kent, 39
 meadow vole, reproduction, 124
 migrant workforce, 29, 114–115, 260
 migratory birds, 268–269
 milkweed, 198
 Mirus, Rachael Sargent, 220–221
 mites, varroa (parasitic), beekeeping, 280–281
 moon, full, 60
 morel mushrooms, 171
 Morrill, Justin, 154–155
 Morrissey, Laurie D., 60, 168
 Morse, Susan C., 40–41, 104, 107, 109
 moths, webworm webs, 245
 Mraz family, honey making, 282–285
 mushrooms, wild, 17, 171

N

Narowski, Amanda, 270–271
 Native Americans, 154–155
 neonicotinoid (insecticide), 282–285
 NEOWISE comet, 217
 Northeast Kingdom Hemp, 50–53
 northern shrikes (bird), 39
November (reflections), 36

O

October (reflections), 14
On Faith (reflections), 74–75
 oscillations, weather, 59, 81, 101, 123, 193
 owls, barred, 102–103

P

paintings, monthly (DeFriez), 12, 34, 56, 78, 98, 120, 144, 166, 190, 214, 240, 264
 parasitic yellow grubs (*Clinostomum marginatum*), 244
 Parker, Scudder, 63
 passenger pigeons, 22–23
 pear thrips (insect), 170
 pear trees, 151
 perch fishing, parasites, 244
 Perkins, Nathan (1749–1838), 178–179
 Perry, Leonard, 128–129, 273
 Pfeiffer, Bryan, 172–173
 PFOA (perfluorooctanoic acid), contamination, 235
 photosynthesis, C4 plants, 245

pigeon slaughter of 1760, 22–23
 pig farming, 158–160
 pig misbehavior, 62
 Pill, Carrie (painting), 117
 plant hardiness zones, 177
 polar vortex, 101
 Porche, Verandah, 19, 26–28
 potato mania, Early Rose, 228–230
 Proctor Maple Research Center, 105
 produce (vegetables), farms and markets, 258–261
 Proft, Scout, 261
 pruning trees, 85, 128–129

R

ramp bulbs, pickled (recipes), 150
 recipes
 barbeque wood smoke flavors, 200
 bear grease uses, 270–271
 bug spray, homemade, 150
 honey, baking with, 278–279
 maple syrup treats, 127
 pickled ramp bulbs, 150
 squirrel meat, 272
 switchel, 279
 tomato seed saving, 222–223
 vegetables, freezing, 19
 venison, 42–44
 wild turkey, 176–177
 woodland teas, 63
 red-bellied snakes, 244
 reflections (monthly essays), 14, 36, 58, 80, 100, 122, 146, 168, 192, 216, 242, 266
 Rellini, Alessandra, 62, 158–160
 Robillard, Madelyn, 261
 Rockland-Miller, Ari, 17
 root cellars, 18
 rumen, deer, 103

S

saffron crop and uses, 254–255
 salame production (pork), 158–160
saudade (October reflections), 14
 sawtimber, pruning, 85
 scarlet cup (fungus), 149
 Scott, Mike, 247
 seeds
 Seed Law, Vermont, 181
 seed producers, 182–185
 seed saving, 222–223
 seeds foreign to U.S., 181
 seed sowing, soil temperatures, 175
 tree seeds, 16
September (reflections), 266
September At The Home (poem), 19
 Shanny, Sean and Charlynn, 201–203
 sheep farming, 152–153, 156–157
 sheepskin care, 84–85
 Shropshire sheep, pest control, 72–73
 Side Hill Cider Mill, 30
 balsamic vinegar, 30
 Simison, Brett, 29
 snakes, red-bellied, 244
 snapping turtle incubation, 196–197
 snowshoe hares, infant (leveret) feeding, 195
 soil temperatures, seed sowing, 175
 soil testing resources, 151

Someday Farm, 261
 speckled alder, symbiotic tree growth, 218
 squirrel meat (recipe), 272
 Stafford, William, 204–205
 Stearns, Tom, 182–185
 stewardship, forests, 186–187
 St. Pierre, Amanda, 112–113
 strawberry farming, 206–209
 Stroffolino, Brian, 260
 subaquatic life, 60
 sugarmaking
 bulk buying, market trends, 137
 homeschooling lessons, 138
 maple syrup treats (recipes), 127
 photographic images of, 134–136
 price and production charts, 133
 production trends, 132–133
 sap microbial concentrations, 124
 sap tank mishaps, 126–127
 sugarbush management, 138–139
 sugar content ratios, 148–149
 tapping trees, 105
 The Trees Called the Dance (reflections), 140–141
 weather impact, 123
 Sunrise Farm, 234, 256–257
 switchel (recipes), 279

T

teas, woodland (recipes), 63
 temperature observations. *see* weather observations
The Breaking of Nations (poem), 180
The Trees Called the Dance (reflections), 140–141
 Thomas Dairy, 117
 Three Dozing Dogs Farm, 201–203
 ticks (arachnids), 194
 timber value, 92–95
 tobacco hornworm caterpillars (*Manduca sexta*), 269
 tomato seed saving (recipes), 222–223
 Tonino, Leath, 216
 Torrey, Bill, 86–87, 151, 246–247
 tracking, medium-sized mammals, 104–105
 tree lungwort, lichen (*Lobaria pulmonaria*), 148
 trees
 charcoal making process, 199
 crop tree release, 248–249
 fruit bearing, apple, 24–25, 26–28, 30, 31, 128–129
 fruit bearing, pear, 151
 growth rings, 195
 pruning, 31, 85, 128–129
 seeds, 16
 softwood crop, 85
 speckled alder symbiotic growth, 218
 stump growth, 40–41
 tapping (sap), 105
 white pine, needle drop, 195
 woodland cultivation, 186–187
 see also Christmas tree cultivation; forests
 Tudish, Catherine, 266
 turkey, wild (recipes), 176–177
 turkey feathers, 170–171
 turtles (snapping), incubation, 196–197
 Tyrol, Adelaide Murphy (illustration), 20

U

Universal Recycling Law, Vermont (Act 148), 232–233, 236–237
 Use Value Appraisal (UVA) program, 138

V

varroa mites (parasitic), beekeeping, 280–281
 vegetables, freezing (recipes), 19
 venison (recipes), 42–44
 Vermont Atlas of Life, 39
 Vermont Beekeepers Association, 278–279
 Vermont Bee Lab (UVM), 286
 Vermont Dairy Producers Alliance, 63, 112–113
 Vermont eBird (Vermont Atlas of Life website), 39
 Vermont Game Wardens, annual trends, 247
 Vermont Grand View Farm, 152–153
 Vermont tour and accounting (1789), 178–179
Verpa spp. mushrooms (false morel), 171
 vinegar production, 30
 vole, meadow, 124

W

Walton's Vermont Register and Farmer's Almanac (Walton's Register), 88–89
 Warden Service Division, (Vermont), annual trends, 247
 wasps, braconid, tobacco hornworm parasitoid (*Cotesia congregata*), 269
 watercolors, wild foraged, 220–221
 Waterman, Laura, 140–141
 weather observations
 autumn foliage impact, 267
 dry conditions and drought, 169, 193, 217, 243, 267
 exaggerated oscillations, 59, 81, 101, 123, 193
 rain events, 15, 147, 243, 267
 snow and ice, 81, 101, 147, 169
 sugarmaking impact, 123, 147
 temperatures, above average, 15, 81, 123, 217
 temperatures, below average, 37, 147
 USDA plant hardiness zones, 177
 wind & thunderstorms, 123, 169, 193
 webworm webs (moths), 245
 weed control, natural, 72–73
 Welch, Molly, 28
 Werner, Amanda, 64–65, 70–73
 Werner Tree Farm, 70–73
 West, Ethan, 276–277
 whirligig beetles, 245
 White, Patrick, 50–53, 70–73, 174, 182–185, 219, 236–237
 white pines (tree), needle drop, 195
 wild mushrooms, 17, 171
 wild turkey (recipes), 176–177
 winterberries (*Ilex verticillata*), 39
Winter Stay in a Peat Bog (poem), 106
 Woodhouse, Valerie, 261
 woodland teas (recipes), 63
 woodland tree cultivation, 186–187
 wood products, 90–91
 wool industry, 156–157
 Wooster, Chuck, 234, 245, 256–257
 wreath making, balsam, 64–65

Y

yellow grubs (*Clinostomum marginatum*), parasitic, 244

SPONSOR INDEX

The organizations who stepped up to support Volume I of the *Vermont Almanac* had no model in hand to see what they were signing onto. And yet they stepped up during a global pandemic that challenged many of their own business models. Their generosity and good faith are what made the *Almanac* possible. Please be sure to thank them when you see them.

Bill Torrey, Vermont Storyteller.....	262
Casella Waste Systems, Inc.....	239
Charlie’s Coffee House.....	164
Chelsea Green Publishing.....	212
Community Development and Applied Economics (CDAE), UVM.....	238
Cookeville Woodworking.....	33
Co-operative Insurance Companies.....	77
Copeland Furniture.....	96
Goosewing Timberworks, LLC.....	97
J.K. Adams Co.....	238
Mance Family Tree Farm.....	118
Manchester Center Restaurants.....	164
Meadow Ridge Farm.....	77
Migrant Justice – Justicia Migrante.....	188
North Country Organics.....	188
Northeast Organic Farming Association of Vermont (NOFA-VT).....	55
Power Guru Solar Energy.....	189
Prospect Mountain Ski Are.....	119
Social House (SoHo) Restaurant.....	164
Springfield Printing Corporation.....	54
Sunrise Organic Farm, LLC.....	263
Union Underground GastroPub.....	164
University of Vermont (UVM) Community Development and Applied Economics (CDAE).....	238
Vermont Beekeepers Association.....	189
Vermont Center For Ecostudies.....	54
Vermont Evaporator Company.....	142
Vermont Forest Industry Network (VSJF).....	213
Vermont Land Trust.....	32
Vermont Maple Sugar Makers’ Association.....	143
Vermont Natural Resources Council.....	33
Vermont Organic Farmers, LLC.....	212
Vermont Renewable Fuels, Inc.....	76
Vermont Woodlands Association.....	97
Willing Hands.....	262