

The Practical Handbook Of Compost Engineering

Worms are the latest (as well as, of course, perhaps the oldest!) trend in earth-friendly gardening, and in this handy guide, the authors of DEAD SNAILS LEAVE NO TRAILS demystify the world of worm wrangling, with everything you need to know to build your own worm bin, make your garden worm-friendly, pamper your soil, and much much more.

Co-edited by international earthworm expert Clive A. Edwards, Vermiculture Technology: Earthworms, Organic Wastes, and Environmental Management is the first international, comprehensive, and definitive work on how earthworms and microorganisms interact to break down organic wastes on a commercial basis. Many books cover the importance of composting

Interest in solid waste disposal has been growing since the early 1960s, when researchers emphasized the potential for solid waste to harbor pathogenic microorganisms. Since then, society has become more interested in the environmental impacts of solid waste treatment and disposal, and how biological processes are used to minimize these impacts. This new text provides a basic understanding of the unique microbial ecosystems associated with the decomposition of municipal solid waste (MSW). It addresses the challenges of sampling and assaying microbial activities in MSW and describes preferred methods. The decomposition of MSW under anaerobic conditions in landfills and digestors is described, as well as under aerobioconditions during composting. The Microbiology of Solid Wastes discusses the need to consider MSW as an integrated system of collection, recycling, treatment, and disposal. A better understanding of solid waste microbiology will contribute to safe and economical solid waste management. Microbiologists, environmental engineers, and solid waste managers will all find this a useful reference.

The ultimate guide to individual- and community-scale composting in small urban spaces—with illustrations, expert tips, fun DIY projects, and much more These days, everyone's talking about compost. Along with backyard chickeners, balcony beekeepers, rooftop farmers, and community gardeners, urban composters are part of a bumper crop of pioneers who are redefining the green space of crowded towns and cities. You may think you need a big yard to compost. Think again. Compost City teaches you how to easily choose and care for a compost system that fits perfectly into your (tiny) space, (busy) schedule, and (multifaceted) lifestyle. Whether you live in a cramped apartment or a sprawling town house, or you dream of composting in a shared space with a group of friends or colleagues, Compost City provides simple and effective indoor and outdoor composting options. Packed with research, expert testimonies, and a healthy dose of humor, this guide will help you:

- *Compost your food scraps and yard waste with ease*
- *Ease your fears of backbreaking labor, obnoxious odors, big messes, and creepy crawlies (hint: you can compost successfully without any of the above!)*
- *Convince compost-wary family, friends, neighbors, and community leaders to green-light your compost dreams*

Compost City serves all eco-curious citizens from casual hobbyists to staunch activists. So put your compost cap on. Whether you compost one tea bag or whole honking barrelfuls of scraps at a time, you're about to have a whole lot of fun.

The Art of Composting for Your Yard, Your Community, and the Planet

The Living Soil Handbook

A Complete Guide for Farmers, Gardeners and Landscapers

The Practical Handbook of Compost Engineering

Shit in a Nutshell

Effective Use of Manure as a Soil Resource

The Organic Grow Book - English Edition

Benefits and drawbacks; The composting process; Raw materials; Composting methods; Composting operations; Management; Site and environmental considerations; Using compost; Marketing agricultural compost; Farm composting economics: focus on production costs; Other options for waste management and composting; Characteristics of raw materials; Equipment tables; Troubleshooting and management guide; Work sheets and forms; Environmental agencies; Metric conversions.

From wastestream to mainstream, a practical guide to composting toilet systems. Composting toilets are a key feature for local resilience, money saving, water conservation, resource recovery, septic system replacement, and an improved bathroom experience in rural and urban buildings. Essential Composting Toilets is a streamlined manual that takes a practical, how-to approach to composting toilet system selection, design, installation, and operation, while meeting universal health and safety objectives. Drawing from existing regulations and research, this book dispels myths and provides tools to assess various systems. It includes: Easily-understood drawings, plans, and photos Coverage of all main composting toilet systems Selection criteria including site considerations, urine separation pros/cons, renovations/new builds, ventilation, servicing, and composting details Design and installation details. Offering a professional approach accessible to DIYers, homeowners, designers, building consultants, water conservation advocates, and regulators, Essential Composting Toilets provides key information for redesigning toilet systems anywhere in the world.

"This is a self-published book that no respectable publisher would touch with a ten-foot shovel. The fourth edition of this underground classic is completely revised, expanded, and updated, help new edition and half sequel. The author draws on forty years of research, experience, and travel, to expand and clarify your knowledge and understanding of ... your poop and what you can

do with it! "--Page 4 of cover.

The first-ever book on this subject establishes a rigid, transparent and useful methodology for investigating the material metabolism of anthropogenic systems. Using Material Flow Analysis (MFA), the main sources, flows, stocks, and emissions of man-made and natural materials can be determined. By demonstrating the application of MFA, this book reveals how resources can be conserved and the environment protected within complex systems. The fourteen case studies presented exemplify the potential for MFA to contribute to sustainable materials management. Exercises throughout the book deepen comprehension and expertise. The authors have had success in applying MFA to various fields, and now promote the use of MFA so that future engineers and planners have a common method for solving resource-oriented problems.

A Practical Handbook

Raising Small Livestock

Methods in Agricultural Chemical Analysis

Practical Handbook of Material Flow Analysis

The No-Till Grower's Guide to Ecological Market Gardening

Easy Compost

Compost City

In his insightful new book, Holy Shit: Managing Manure to Save Mankind, contrary farmer Gene Logsdon provides the inside story of manure-our greatest, yet most misunderstood, natural resource. He begins by lamenting a modern society that not only throws away both animal and human manure-worth billions of dollars in fertilizer value-but that spends a staggering amount of money to do so. This wastefulness makes even less sense as the supply of mined or chemically synthesized fertilizers dwindles and their cost skyrockets. In fact, he argues, if we do not learn how to turn our manures into fertilizer to keep food production in line with increasing population, our civilization, like so many that went before it, will inevitably decline. With his trademark humor, his years of experience writing about both farming and waste management, and his uncanny eye for the small but important details, Logsdon artfully describes how to manage farm manure, pet manure and human manure to make fertilizer and humus. He covers the field, so to speak, discussing topics like: How to select the right pitchfork for the job and use it

correctly How to operate a small manure spreader How to build a barn manure pack with farm animal manure How to compost cat and dog waste How to recycle toilet water for irrigation purposes, and How to get rid ourselves of our irrational paranoia about feces and urine. Gene Logsdon does not mince words. This fresh, fascinating and entertaining look at an earthy, but absolutely crucial subject, is a small gem and is destined to become a classic of our agricultural literature.

The Composting Handbook provides a single guide to the science, principles and best practices of composting for large-scale composting operations facing a variety of opportunities and challenges converting raw organic materials into a useful and marketable product. Composting is a well-established and increasingly important method to recycle and add value to organic by-products. Many, if not most, of the materials composting treats are discarded materials that would otherwise place a burden on communities, industries, farms and the environment. Composting converts these materials into a valuable material, compost, that regenerates soils improving soils for plant growth and environmental conservation. The Composting Handbook expands on previously available resources by incorporating new information, new subjects and new practices, drawing its content from current scientific principles, research, engineering and industry experience. In both depth and breadth, it covers the knowledge that a compost producer needs to succeed. Topics include the composting process, methods of composting, equipment, site requirements, environmental issues and impacts, business knowledge, safety, and the qualities, uses and markets for the compost products. The Composting Handbook is an invaluable reference for composting facility managers and operators, prospective managers and operators, regulators, policy makers, environmental advocates, educators, waste generators and managers and generally people interested in composting as a business or a solution. It is also appropriate as a textbook for college courses and a supplemental text for training courses about composting or organic waste management. Created in conjunction with the Compost Research and Education Foundation (CREF) Includes the latest information on composting and compost, providing the first comprehensive resource in decades Written with focus on both academic and industrial insights and

advances

The first and only complete guide to sourcing and using woodchip—an abundant, inexpensive, and ecologically sustainable material—for savvy growers and landscapers at any scale, from farm to garden to greenhouse. The Woodchip Handbook is the essential guide to the many uses of woodchip both in regenerative agriculture and horticulture. Author Ben Raskin, Head of Horticulture and Agroforestry at the Soil Association, draws on his extensive practical experience using woodchip, provides the latest research from around the world, and presents inspiring case studies from innovative farmers. The book explores and unlocks the tremendous potential of woodchip to enhance soil health and plant growth: As a natural mulch for weed suppression, temperature buffering, and water conservation As a growing medium for propagating plants As a decomposing source of warmth for hotbeds in the greenhouse or hoop house As a carbon-rich compost ingredient that supports beneficial fungi and microorganisms As a powerful soil health booster, when applied as small-sized ramial chipped wood As an ideal substrate for growing many kinds of edible or medicinal mushrooms As a sustainable, versatile, and durable material for foot paths and ornamental landscaping Some of these techniques, like mulching—or the renewable harvest potential from coppicing and pollarding trees—have been around forever. Yet there is always new science to be discovered, such as the role that salicylic acid from willow woodchip can play in preventing tree diseases or promoting livestock health when used as a bedding material. Whether you are a commercial grower or farmer, a permaculture practitioner, or a serious home gardener producing your own fruit and vegetables, The Woodchip Handbook will show you how to get the most out of this readily available and renewable material.

This practical handbook reveals new organic gardening techniques. It's a compendium of secrets rediscovered and innovative tips. Beneficial micro-organisms, bokashi or biodynamic compost, permaculture, vortex, seeds and cuttings... The Organic Grow Book opens the doors to a full-scale (r)evolution where productivity goes hand in hand with quality. Summer and winter, in soil or bioponic, learn to grow healthier and tastier plants – fruit, vegetables, flowers – while enhancing your own well-being and the

planet's. With its broad array of unprecedented strategies and proven tips, this eco-responsible and highly humorous guide is a must for all mindful gardeners, whether beginners or experts. Photos, 3D diagrams, microscopies, step-by-step graphs... over 500 original illustrations. BioScope® Addresses and websites Trade shows and fairs Over 550 professional entries « An indoor & outdoor organic gardening reference. » Ushuaia TV « A very precious book. » Le Monde « Explains everything about organic gardening. A heck of a book! » France Inter

The Humanure Handbook

A how-to and why manual for farm, municipal, institutional and commercial composters

Microbiology of Solid Waste

Mike McGrath's Book of Compost

Practical Handbook of Processing and Recycling Municipal Waste

A Guide to Options, Design, Installation, and Use

The Complete Guide to Landscape Design, Renovation and Maintenance

Provides instructions on how to get started, discusses the history and chemistry of composting, and explains why composting has become a vital part of waste disposal

Compost Utilization in Production of Horticultural Crops provides information for the compost industry to develop horticulture production efforts and techniques. This highly practical book contains information applicable to current production issues facing the fruit and nuts, vegetable, and ornamentals and turfgrass industry. Written by scientific experts, chapters evaluate the uses of compost for greater crop yields and decreased plant disease and pesticide application, irrigation water and fertilizer demand. Considering compost use increases carbon sequestration, the book provides guidelines on converting safe waste materials into composted soil amendments while minimizing negative impacts on the environment. Chapters cover the diversity and variability on compost uses of available feedstocks; composting methods, application rates, methods and timing; and considers the benefits of application alone or combined with other organic or inorganic nutrient sources. Practical reference for regular use by professionals in compost and horticulture industries. Presents information for both agricultural and waste management. Addresses the effects of compost on soil health and food safety. Discusses compost quality and compost as a supplement in soil fertility programs. Features information on compost nematodes management, compost teas effect on foliar diseases, and the economic impact of compost on crop production. This book is essential reading for fruit and nuts, vegetable, ornamental

landscape and turfgrass producers; waste and compost industry representatives, consultants and regulators; and academic plant and soil science researchers.

Techniques and systems for processing food scraps, manure, yard debris, paper, and more Turning waste into wealth sounds too good to be true, but many worm farmers are finding that vermicomposting is a reliable way to do just that. Vermicast--a biologically active, nutrient-rich mix of earthworm castings and decomposed organic matter--sells for \$50 or more per cubic yard. Compare that to regular compost, sold at about \$30 a cubic yard, and you'll see why vermicomposting has taken root in most countries and on every continent but Antarctica. Vermicomposting is also one of the best sustainable solutions for organic waste management. Vermicomposting manure and crop wastes on farms improves crop yields while reducing demand for off-farm inputs. Vermicast has higher nutrient levels and lower soluble salt content than regular compost, and it improves soil aeration, porosity, and water retention. Plus, vermicast suppresses plant diseases and insect attacks. Municipalities, businesses, community gardens, schools, and universities can set up vermicomposting operations to process food residuals and other waste materials. The Worm Farmer's Handbook details the ins and outs of vermicomposting for mid- to large-scale operations, including how to recycle organic materials ranging from food wastes and yard trimmings to manure and shredded office paper. Vermicomposting expert Rhonda Sherman shares what she has learned over twenty-five years working with commercial worm growers and researchers around the world. Her profiles of successful worm growers across the United States and from New Zealand to the Middle East and Europe describe their proven methods and systems. This book digs into all the details, including:

- Choosing the right production system
- Regulatory issues and developing a business and marketing plan
- Finding and managing feedstocks
- Pre-composting: why and how to do it
- Monitoring an active worm bed
- Harvesting, screening, testing, packaging, and storing vermicast
- Markets for earthworms and vermicast
- Food security: how vermicast benefits soils and plants
- Keys to success: avoiding common pitfalls

From livestock farms and restaurants to colleges, military bases, and prisons, Sherman details why and how commercial-scale vermicomposting is a fast-growing, sustainable solution for organic waste management. The Worm Farmer's Handbook is the first and only authoritative how-to guide that goes beyond small-scale operations and demystifies the science and logistics of the fascinating process that is vermicomposting.

Principles and farm-tested practices for no-till market gardening--for healthier, more productive soil! From the host of the popular The No-Till Market Garden Podcast--heard around the world with over 850k downloads! Discovering how to meet the soil's needs is the key task for every market gardener. In this comprehensive guide, Farmer Jesse Frost shares what he has learned through experience and experimentation with no-till practices on his home farm in Kentucky and from

interviews and visits with highly successful market gardeners in his role as host of The No-Till Market Garden Podcast. The Living Soil Handbook is centered around the three basic principles of no-till market gardening: Disturb the soil as little as possible. Keep it covered as much as possible. Keep it planted as much as possible. Farmer Jesse then guides readers in applying those principles to their own garden environment, with their own materials, to meet their own goals. Beginning with an exploration of the importance of photosynthesis to living soil, Jesse provides in-depth information on: Turning over beds Using compost and mulch Path management Incorporating biology, maintaining fertility Cover cropping Diversifying plantings through intercropping Production methods for seven major crops Throughout, the book emphasizes practical information on all the best tools and practices for growers who want to build their livelihood and maximize the health of their soil. Farmer Jesse reminds growers that "as possible" is the mantra for protecting the living soil: disturb the soil as little as you possibly can in your context. He does not believe that growers should argue over what does and does not qualify as "no-till." If you are using a tool to promote soil life and biology, that's the goal. Jesse's goal with The Living Soil Handbook is to provide a comprehensive set of options, materials, and field-tested practices to inspire growers to design a soil-nurturing no-till system in their unique garden or farm ecosystem. "[A] practical, informative debut. . . .Gardeners interested in sustainable agriculture will find this a great place to start."—Publishers Weekly "Frost offers a comprehensive, science-based, sympathetic, wholly practical guide to soil building, that most critical factor in vegetable gardening for market growers and home gardeners alike. A gift to any vegetable plot that will keep on giving."—Booklist (starred review)

Industrial Composting

Getting Started at Home : a Practical Guide to At-home Composting Programs

Earthworms, Organic Wastes, and Environmental Management

A Guide to Composting Human Manure

A Guide to Eating Well and Saving Money By Wasting Less Food

Grow Cacti

Compost Utilization in Production of Horticultural Crops

The most comprehensive, up-to-date and thoroughly researched book on the topic of composting human manure available anywhere. It includes a review of the historical, cultural and environmental issues pertaining to "human waste," as well as an in depth look at the potential health risks related to humanure recycling, with clear instructions on how to eliminate those dangers in order to safely convert humanure into garden soil.

Written by a humanure composter with over thirty years experience, this classic work now includes illustrated, step-by-step instructions on how to build a humanure toilet, a chapter on alternative graywater systems, photos of owner-built humanure toilets from around the world, and an overview of commercial composting toilets and systems.

This crucial reference focuses on the growth of vegetation on disturbed lands, specifically the problems of plant seeding and growth and the ecological consequences of that growth. This one-of-a-kind book covers the spectrum of plant development, including the creation of an acceptable rooting medium and seeding or planting, and discusses practices to enhance diversity and usefulness of the plant community. This handbook gives detailed examples of how to rehabilitate and restore damaged land and, in most cases, mined land. The book focuses on the complete restoration of soil, water, vegetation, and wildlife. It provides a thorough introduction to the science behind the practice and follows with practical examples. A complete, detailed list of genera and species to expedite restoration is also included.

A rhyming recipe explains how to make the dark, crumbly, rich, earth-friendly food called compost while collage illustrations made with recycled and found materials echo the eco-friendly message. By the author of Millions of Snowflakes.

This book contains 12 chapters focusing on: (i) experimental planning; (ii) sample preparation; (iii) weighing and dispersing; (iv) acid-digestion, ashing and extracting procedures; (v) analysis of soil and compost; (vi) analysis of fertilizers; (vii) analysis of animal feed and plant materials; (viii) analysis of silage; (ix) near infrared spectroscopy; (x) methods in equine nutrition; (xi) methods for organic farmers and growers; and (xii) quality assurance and control.

Vermiculture Technology

Waste-Free Kitchen Handbook

The Practical Book of Outdoor Flowers

The Worm Book

A Practical Handbook for the Home Landscape Gardener

The Rodale Book of Composting

AgGuide

Composting at scales large enough to capture and recycle the organic wastes of a given community, whether a school, neighborhood, or even a small city, is coming of age, propelled by a growing awareness not only of our food waste crisis, but also the need to restore natural fertility in our soils. In-depth yet accessible, Community-Scale Composting Systems is a technical resource for farmers, designers, service providers, organics recycling entrepreneurs, and advocates of all types, with a focus on developing the next generation of organics recycling infrastructure that can enable communities to close the food-soil loop in their local food systems. The main scope of the book is dedicated to compost system options and design, from basic sizing and layout to advanced techniques such as aerated static pile composting. Management techniques and operational considerations are also covered, including testing, feedstock characteristics, compost recipe development, and system-specific best management practices. Though focused on recycling systems that include food scraps--the fastest growing sector of community-scale composting--the book is informed by and relevant to other composting sectors and will be a vital resource for anyone invested in diverting organic materials away from landfilling and incineration. Topics covered include: Community-scale models Estimating organics from individual generators and whole communities Food scrap collection Compost system sizing Aerated static pile (ASP) systems design In-vessel systems selection Integrating animals with composting Compatibility with compost heat recovery, vermicomposting, and other specialized methodologies Composting best management practices Nuisance management Mitigating persistent herbicides End uses, marketing, and sales Whether you're an engineer, community organizer, permaculturalist, public sector waste manager, farmer, or just a dirt lover, Community-Scale Composting Systems is the definitive manual on composting, written at a crucial time when communities are just starting to see what the composting movement will ultimately offer our food systems, local and regional economies, and planet.

Includes information on composting's history; tips on equipment; tips for difficult climates; composting indoors; making humus in small spaces; and using compost in the garden.

If we could understand the scientific and engineering principles behind recycling, our ability to use reprocessed materials would improve considerably. If we could then apply those principles, our efforts to process and recycle waste would be significantly more efficient and cost-effective. Practical Handbook of Processing and Recycling Municipal Waste provides all of the information necessary for vastly improving the way we recycle materials. It first develops basic engineering and scientific theories related to processing and recycling municipal waste. The authors then show how the behavioral characteristics of waste can actually be predicted with some degree of accuracy, hence turning waste disposal engineering from a matter of guesswork into a science. From Europe to the United States to the Far East, humankind understands the need for - and the challenges of - recycling and reusing waste. This handbook is the guide to successful, efficient waste processing and reuse.

Resource added for the Landscape Horticulture Technician program 100014.

A Practical Handbook of Trees, Shrubs, Vines and Herbaceous Perennials

A Comprehensive Practical Guide for Closing the Food System Loop and Solving Our Waste Crisis

A Practical Handbook Upon Agricultural Tenancies for the Use of Landlords, Their Agents, and Tenants, Together with the Text of

the Agricultural Holdings Acts, 1908 (English and Scottish) and the Small Holdings & Allotments Act, 1908

Essential Composting Toilets

Managing Manure to Save Mankind

An A to Z Recipe for the Earth

The Secret to Great Soil and Spectacular Plants

The ultimate in recycling, composting has been in use in some form since ancient times. A well-managed composting facility should exist as a good neighbor contributing to ecology. However, since local populations often perceive risks if a composting facility is built nearby, composting facilities must be designed and operated with minimal odor, dust. For rural property owners considering raising small animals, this clearly written guide provides guidance and information on caring for animals, available breeds, disease control, and mixing feed. 27 halftones; 23 line illustrations.

This “slim but indispensable new guide” offers “practical tips and delicious recipes that will help reduce kitchen waste and save money” (The Washington Post). Despite a growing awareness of food waste, many well-intentioned home cooks lack the tools to change their habits. This handbook—packed with engaging checklists, simple recipes, practical strategies, and educational infographics—is the ultimate tool for using more and wasting less in your kitchen. From a scientist at the Natural Resources Defense Council come these everyday techniques that call for minimal adjustments of habit, from shopping, portioning, and using a refrigerator properly to simple preservation methods including freezing, pickling, and cellaring. At once a good read and a go-to reference, this handy guide is chock-full of helpful facts and tips, including twenty “use-it-up” recipes and a substantial directory of common foods.

Reveals why compost is the answer to virtually every garden question. McGrath explains why compost improves soil structure; why it provides the perfect amount of food for every plant; how it fights plant diseases more safely and effectively than any chemical fungicide; and how to make your own.--From publisher description.

Practical Composting Know-How for Small-Space Living

The Woodchip Handbook

Easy Methods for Every Gardener

A Practical Handbook : Using Compost in Agriculture

Animal Waste Utilization

Community-Scale Composting Systems

Compost this Book!

This unique book examines the beneficial aspects of animal waste as a soil resource - not simply as an agricultural by-product with minimal practical use. Topics include o types of livestock waste - swine, poultry, dairy o methods and management of waste utilization o storage, handling, processing and application of animal waste o supplying crop nutrients o economics of waste utilization o new modeling and management techniques o nonpoint source pollution, water quality, leaching, and air quality.

The Practical Handbook of Compost Engineering presents an in-depth examination of the principles and practice of modern day composting. This comprehensive book covers compost science, engineering design, operation, principles, and practice, stressing a fundamental approach

to analysis throughout. Biological, physical, chemical, thermodynamic, and kinetic principles are covered to develop a unified analytical approach to analysis and an understanding of the process. A brief history of the development of composting systems, which leads to descriptions of modern processes, is presented. The Practical Handbook of Compost Engineering also discusses the elements of successful odor management at composting facilities, including state-of-the-art odor treatment and enhanced atmospheric dispersion. The book is excellent for all engineers, practitioners, plant operators, scientists, researchers, and students in the field.

Explains what composting is and how it works, provides instructions for making and using compost, and offers ecologically sound solutions to waste disposal problems

The Composting Handbook
Handbook

Practical Handbook of Disturbed Land Revegetation

The Complete Guide to Gardening and Composting with Worms

The Worm Farmer's Handbook

Environmental Engineering and Facilities Management

Holy Shit