



Climate Adaptation:

Advanced Soil Management

Justin Smith, Green Pigeon, APSE Approved Partner
Foundations of Soil Mechanics, Chemistry, Biology, Drainage, and Carbon
Management.

Advanced Soil Management

Purpose

Understanding the basic principles and complex science of soils will ensure that common mistakes in soil and plant management are avoided. This programme aims to simplify the fundamentals of soil physics, mechanics and biochemistry, demonstrating how to apply first principles to improve soil health, increasing plant and soil resilience and optimising soil carbon sequestration.

Soil is a living entity and like all living organisms requires a balance of air, water and nutrition. In return, soil provides the fundamental foundation for plant life to thrive. Without healthy soils, grasses, trees and crops will be less resilient to disease. Additionally, unhealthy soil increases the cost burden of maintenance to address the wear and tear on sports grounds. This course will focus on plant and soil relationships, nutrition, pH, and the use of specialist grasses for increasing playability and carbon capture.

Who should attend?

Those involved in the management of grounds, grounds maintenance, land management, food growing strategies, climate change, sustainability, rewilding, and parks and open spaces.

Learning Outcomes:

- Appreciate the fundamentals of soil as a living entity
- Compare silt, tree and wildlife strategies and priorities.
- Evaluate the scientific basis for healthy soil management
- Explore how to build climate credentials with effective soil sequestration
- Draw conclusions and plan next step developments

Agenda

Join 15 minutes before the start for Registration and Tech Check

	Welcome and introductions
Part 1 (3 hrs)	Introduction to Soil Soil, trees and wildlife – equitable vigilance Texture and structure – identifying and preventing problems Mechanical Management Soil and water
Part 2 (3 hrs)	Soil Health and Plant Relationships Texture and Cation Exchange Biology and Chemistry Nutrition in Turf management
Part 3 (3 hrs)	Soil Biodiversity and Carbon Storage Improving biodiversity Carbon prediction and carbon storage

Each half-day session will take place over Microsoft Teams and be punctuated by a mid-session comfort break. This course can be delivered over one full day, onsite, as part of our in-house package.

Trainer Profile

Justin Smith

Justin is an experienced entrepreneur, with a track record of building and selling successful companies in amenity and open space developments. Justin is a qualified agronomist and has nearly 40 years' experience in plant soil and water management. He founded Green Pigeon in May 2024 to support local authorities in their carbon neutrality targets, with a focus on open space environmental consultancy services to the public sector

As the Founder and former Managing Director of Cemetery Development Services Ltd, Justin launched the first specialist environmental management and planning company for cemetery design and development.



In-house packages – tailored training to meet your needs.

Any of our courses can be customised to meet the needs of your team, service or authority. The package includes:

- A pre-course consultation so we can tailor the course to meet your needs.
- Trainee Needs Analysis.
- Customisation of the slide pack.
- Delivery of the course on a mutually convenient date and time to meet your authority's needs and working patterns.
- Analysis of trainee feedback, which we share with you.
- Trainer feedback, if required.
- Post-course materials on password-protected hidden webpage.

If delivered online, the course is suitable for up to 15 participants and over two half-days or one full day, via Microsoft Teams

If delivered onsite, it is suitable for up to 20 participants. Trainer travel, subsistence and accommodation is charged at cost.

About APSE Training

APSE (Association for Public Service Excellence) is a not-for-profit local government think tank, working with over 300 councils throughout the UK, promoting excellence in public services.

APSE is the foremost specialist in local authority front line services, hosting a network for front line service providers in areas such as waste and refuse collection, parks and environmental services, leisure, school meals, cleaning, housing, and building maintenance.

APSE Training aims to provide inspiring and impactful lifelong learning and development opportunities, nurturing talent and enabling growth. A broad range of courses are available via the APSE website and as bespoke in-house courses.

APSE Training is compliant with APSE's Quality Assurance processes under ISO 9001, ISO 14001, ISO 27001 and GDPR. We are also a Platinum Carbon Literate Organisation, which demonstrates our commitment to raising awareness of the climate crisis.



The team is ready to help.

Please direct enquiries to: training@apse.org.uk | 0161 772 1810

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