

The Forest Floor Dish – Note by Note Cooking

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The Design Brief

- MSc in Culinary Innovation and Food Product Development at Technological University Dublin
- Advanced Molecular Gastronomy Module led by Dr Róisín Burke and Pauline Danaher—focused on the annual International Contest for Note by Note Cooking
- The goal was to design and create a dish that used pure compounds to create edible dishes that incorporate both trigeminal compounds and cellulose or a derivative.
- To create new and exciting dishes using familiar flavours and aromas with new techniques and recipes.

Inspiration for the Forest Floor Dish

- Note by Note Cooking provides a new world of ingredients and techniques that aren't limited by traditional ingredients
- Instead of recreating existing foods I wanted to create a conceptual dish that provided a sense of nostalgia and of a place..a forest
- I grew up near Ballycuggaran Forest in Co Clare, Ireland
- Note by Note Cooking removed the constraints of tradition recipe development by providing the potential for new concepts to be explored



Inspiration for the Forest Floor Dish

- Using the textures, aromas, and the flora or the forest as the inspiration of the dish
- To create a sense of the place using the visual, textural, and smells of the forest using Note by Note Cooking
- The texture of the soil, soft moss, and crisp fallen leaves
- The smell of the trees, mushrooms and plants
- A visual snapshot of a corner of the forest floor: the memory of finding a hidden mushroom



Elements of the Forest Floor

- The key aspects of the forest floor aimed to capture the heady earthy aromas of mushrooms, the fallen autumn leaves, earth and forest moss as well as a variety of flavours that represent the sharpness of pungent leaves and roots.
- Earth – textural soil
- Leaves – crisp fallen leaves of Autumn
- Moss – soft under foot in the forest and a contrasting texture and flavour for the dish
- Mushroom – a colourful, textured, and flavourful focal point for the forest floor dish

The Earth of the Forest: Bacon Soil

The soil was made by melting cocoa butter gently and adding: Colours: Carmoisine (E122), Tartrazine (E102), Patent Blue (E131); Preservative: Sodium Bezoate (E211); Sugar Alcohol: Glycerol (E422), Inverted Sugar, Smoked Bacon Aroma 2,5-Dimethyl Pyrazine, 2-Ethyl-3,5 Dimethyl Pyrazine, Bacon Flavour (Dithazine Trisolutyl 2,4,5-tris(2-Methylpropyl)-1,3,5 Dithiazinane)

- The mixture was cooled to thicken and then slowly incorporated into maltodextrin, soy lecithin and salt to form a crumbly texture.
- This was then refrigerated which changed the texture by cooling the fat.
- This was broken up to form the aromatic bacon soil.



Fallen Leaves on the Forest Floor

Basil & Chlorophyll Leaves

- The leaves were made from water, chlorophyll, glycerine, methylcellulose, natural basil flavours and aroma: Estragole & Linalool, whey protein, Matcha green tea extracts: 1,2-nonadecadienol, Methyl 2-amino-3,4,5-trimethoxybenzoate & 6-Octadecenal, and oil.
- All of the ingredients were mixed together and refrigerated overnight to create a firm gel/paste.
- A template was made of leaf shapes and the paste was thinly spread onto parchment paper and baked until crisp.
- The texture was very light and delicate, similar to a fallen leaf.



Forest Moss: Pea Sponge

The pea sponge was made using water, egg white protein, pea protein, pea aroma, bacon flavour, basil flavours: Estragole & Linalool, oil, methylcellulose, trigeminal compound: Ally Isothiocynate, colours: Tartrazine (E102), Patent Blue V (E131), copper complex of chlorophyll, (E141), preservative: sodium sulphite (E211), emulsifiers: xanthan gum (E415) & Triethyl citrate (E1505), citric acid (E330), sugar alcohol: glycerol (E422).

- The ingredients were incorporated together to form a thin batter.
- The batter was poured into an ISI siphon gun, two canisters of N₂O were added to aerate the mixture and the canister shaken well to incorporate the gas.
- The batter was piped into a plastic container and cooked in the microwave. Once cooled the sponge was broken into small moss like pieces.



The Mushroom

- Fly Agaric Mushroom – eye catching but poisonous fungus found in Ireland
- As children we were not allowed to touch these mushrooms when we came across them in the forest
- I created an edible interpretation of this colourful mushroom that I always wanted to pick



Source of Photo: Dowding, P. & Smith, L. (2008) Forest Fungi in Ireland, "Fly agaric found in Co Mayo", (pg.43), COFORD, Dublin

Mushroom Meringue Recipe Development

- The mushroom meringue was prepared by whisking egg white protein with water, sucrose, salt, mushroom flavour 1-octen-3-ol until stiff peaks formed.
- The mixture was separated and two thirds is coloured using sunset yellow (E110) along with citric acid and potassium sorbate.
- The mushrooms were piped onto plastic trays and the small dots of white meringue applied with a pipette
- The mushrooms were cooked in the microwave until doubled in size
- Once cool, a small piece of the orange mushroom cap is removed to allow the mushroom stalk to fit securely.



The Forest Floor



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