Caring for your Churchyard

6th September 2019 Helen Cruickshank St Chad's Church Green Team

Start of Green Team at St Chad's

• One enthusiastic parishioner

• Support from Yorkshire Wildlife Trust as part of the Living Churchyards Scheme

• Discussed with the PCC 2003

1300 plus churchyards in Yorkshire

• Untouched by intensive agriculture

- Free from artificial fertilisers
- Free from pesticides
- Free from herbicides
- Free from fungicides

Why is our churchyard rich in wildlife?

- Unimproved pasture land with traditional plants
- A wide variety of habitats provide food & shelter



Why is it important to identify the species in the churchyard?

• If we don't know what species are living in the churchyard, how can we protect them?

 It gives a base line for the turn of the century, at a time when environmental conditions are rapidly changing.

Lichens 44 species







Fungi at least 78







Mammals at least 8 species



Birds 43 species



Newer bird boxes

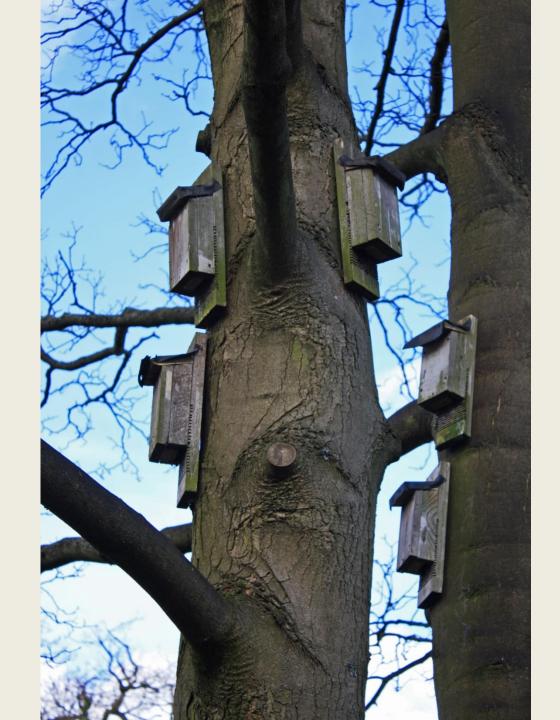




Butterflies 13 species







The hay meadow area established



Rare Yorkshire hay meadow grasses have survived and flourish





Additional flowers





Good for wildlife because:

- Diversity of flora leads to a wider variety of invertebrates
- Good supply of food & shelter for birds
- Ideal habitat for small mammals
- Benefits creatures higher up the food chain

Access for the local Community

- Lichen talk and walk
- Bat evenings
- Bird walks
- Tree walks
- Geology walks
- Wild flower walks
- Fungus forays
- Children's activity days
- Beaver & Scout evenings



Holly Blue

these insects.

Churchyards provide

ideal conditions for

They spend winter

the ivy, and emerge

in spring to lay eggs

on holly flower buds

as a chrysalis in

uthatch These birds run up and down tree trunks extracting insects from the bark. They open large nuts or seeds by ramming them into cracks in bark, and hammering with their beaks.

Frequently seen in the autumn burying acorns from the large oak tree to form a winter larder This tree was a sapling in the reign of Elizabeth I.

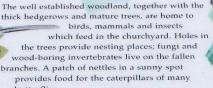
The Story of the Rocks

The geological history in the graveyard stretches back an unimaginable 450 million years. Over the millennia, mountain building and then the gradual destruction of those mountains by erosion, has provided the raw materials i.e. the rocks, from which the gravestones were carved. Here at St Chad's all three major rock groups - Igneous, Sedimentary and Metamorphic, can be found. Igneous rocks (from the Latin 'fire') were first

Imoral Red



Felspar crystals vary in colour and dictate the colour of granite. In this very distinctive pink ranite the felspar ows the rock was quarried in a small area of Finland, even though



butterflies.

This small cross is carved from 'Cornish Giant White Granite'. The large (Sems long) white felspar crystals alfuded to in the ame can be clearly seen ear of the cross

formed from the slow solidification of molten rock (magma 1,000°C), deep within the Earth's crust. As the magma cooled, crystals of quartz, felspar and mica developed an interlocking mosate. This isgranite. The durability, ability to take a polish and the general appeal of granites, have made these rocks popular with stonemasons. Over millions of years, weathering and erosion physically or chemically destroy even the most

> On the rear of the Celtic cross, a fossil Crinoid is visible. magine this animal as a sea urchin on a stalk. The fossil is an oblique section through that stalk. This accounts for its val outline

This Celtic cross is carved from This cente crois is carved upin limestone. The original smooth surface has been etched by acid rainwater, revealing fossils. These indicate that the rock was formed about 330 million years ago in a shallow tropical sea with stong curren

resilient rocks. Rivers, ice and wind carry the resulting sand grains and mud to the sea, where they accumulate as layers of sediment. Eventually these sediments become compacted into sedimentary rocks (the 2nd major rock group), such as sandstone. Meanwhile, animals extract lime from the seawater to construct their shells, which accumulate to form limestones. It is therefore only sedimentary rocks that contain fossils, such as the crinoids and oysters seen in the churchyard.

The final group of rocks are the metamorphic rocks (means 'change

The tailest monument was carved from Portland The callest monument was carved from Portland Limestone, a famous building stone in which the lime appears as tiny (Imm) spherical grains. The industrial atmosphere of Leeds dissolves these grains slightly quicker than the fossil syster shells that now stand proud of the surface Noting the age of the monument, and the extent to which the oysters project, see you can calculate the rate at which the monument is dissolving away

Small Tortoiseshell Hibernate in sheds and hollow trees, emerging at any time on warm sunny days. Nectar of early and late flowering plants an important food source.

> Comma Named after the 'comma' on underside of the hind wing In late summer adults feed on faller fruit before hibernating, well camouflaged in tree trunks or dead vegetation

Painted Lady These butterflies arrive each year from North Africa, and can be seen between May and October.

This is the famous Carrara Marble from Italy. The limestone roust have been exceptionally pure to produce this unblemished white rock. The varied colour of other marbles

results from impurities in the

form'). Any pre-existing rock can be changed into a metamorphic rock by intense heat or pressure generated by the movement of the Earth's crust. For example, when limestone is heated it recrystallises into the mass of interlocking calcite crystals we call marble. Mud (shale) becomes compressed into slate by the realignment of its minute component crystals. To discover more about the great variety of rocks in the churchyard, and their origins, pick up a 'Geological Trail' leaflet from the church or parish office.

Look for the horizontal slate slab. This is the oldest rock in the churchyard, having accumulated as mud 450 million years ago in a shallow sea covering Snowdonia. Later when the Welsh mountains formed, the mud was compressed (metamorphosed) into slate. Examine the edge of the slab where the rock has been sawn. You can see the original mud layer



and hedgerows. Flowers and fruit heads appear together between May and September.

Herb Bennet or Wood Avens

Grows along the margins of woods

Goldfinch

st in trees, and

Listen for their

Now present all

year round. They

source to another,

cheerful twittering.

move from one food

according to season





Green Team Achievements

- **2003** Yorkshire Wildlife Trust Living Churchyard Award runner up.
- 2005 1st Ecocongregation award
- 2006 Yorkshire Wildlife Trust Jubilee Event
- **2006** BBC Springwatch filmed in churchyard
- **2007** Green Organisation Green Apple Award (bronze) for charity & community work
- 2007 Church Times Green Awards "Biodiversity" category winner
- **2008** St Chad's churchyard featured in the Dalesman Magazine
- **2008** Leeds City Council "Community & City Pride" Awards – runner up in the recycling project of the year category
- 2008 Interpretive boards erected in churchyard
- 2008 2nd Ecocongregation Award
- 2012 3rd Ecocongregation Award

- **2013** Yorkshire Post Environment Awards shortlisted for Community Award
- **2014** Leaflet "A Walk around St Chad's Churchyard, Far Headingley" published professionally
- **2014** St Chad's churchyard featured in *British Wildlife Journal*
- **2015** Leaflet "St Chad's Church, Far Headingley, Geological Trail" published professionally
- 2015 Yorkshire Post Environment Awards Community Award winner
- 2016 St Chad's churchyard featured in Yorkshire Post Magazine on 5th June to mark "Cherishing Churchyards" week
- 2016 Eco Church Silver Award
- **2017** Church Times Green Champion Award (shared with other nominees) for Suzanne Dalton

Current Issues at St Chad's

- Dwindling & aging group in the Green Team
- Lack of interest from many in congregation
- Criticism of overgrown appearance of graves
- Dogs / dog owners
- Costs