

Greenhouse Britain Texts 2007



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On The Upward Movement of People
A Bio-diversity Ring for the Pennines

TEXT 1

On The Upward Movement of People

We are standing at the Liverpool dock
imagining the waters rising
first 5, then 10, then 15 meters
thinking about
the upward movement of people
and talking about how that
might happen gracefully.
Deciding to
replace the term "development"
with the term "settlement."
For us
it is a metaphorical flip
an aide to thinking
and thereafter to designing
The differences between
settlement
and development.
They are profound.

The term "settlement"
has embedded in it
the idea of habitat for ourselves
and of niches
for other living creatures
the metaphorical shift
between development design
and settlement design
becomes visible
at its simplest level
in selecting
an appropriate site
and then
tuning settlement
to the carrying capacity of the terrain

So we
with a small group of people
discovered a place in the Pennines
with 16 watersheds running from
the dark peak moorlands
in the east
through a topographically diverse
and ecologically diverse
landscape
with sloping hills.
These moved gently
towards the lower Mersey basin
Beginning at perhaps 350 metres and
ending at perhaps 250 metres.
Within it are
Blanken bog peatlands.

upland moorland and pastureland
with semi-natural woodland
and plantations
including wet and dry meadows
Walking in the terrain
finding aquatic ecosystems
and upland streams
riparian habitat
little dew ponds
and lakeside
and streamside ecosystems.”
We measured this terrain
and shaped it.
Photographed it.
finding that its boundary included 71
square kilometers and about 4500
people living in and about Hayfield
nearby
a quintessentially Pennine place

Understanding this Pennine Place
42 square miles or about 27,000 acres
the power
of the passive sequestration of carbon
here
became obvious
when the choice was made
to conceive an open-canopy forest
the was 40% forested, or 10,800 acres
and 60% meadowland, or 16,200 acres
Since meadows sequester
1 ton of carbon per year
and forests sequester 2 tons per year
This new landscape
would pull
about 37,800 tons
from the air every year.

understanding
that the domestic carbon footprint
of each person is 4 tons per year
then
an open-canopy forest grassland
of the kind we are imagining
could passively sequester
the local carbon
of about 9,000 people
or twice the number
of people living here
enough for
a new 4,500 person
village

A Pennine Village
Which respects the life
within the earth
upon which it stands

as a new Pennine configuration
a new form
in the British landscape mosaic

TEXT 2

Beginning this process
We became for a while
4 groups.
One
thinking about
carbon-sequestration

and a second group
which took on the task
of imagining
an open canopy forest
and meadowland

Then a third group
imagined what a village might look like
Posing the question
"what might they do
that others had not done?"

And a fourth group
began the process of
envisioning this place
as a whole system
that was replicable
around the Pennines.
In fact, a new form
in the British landscape mosaic.

And together
we began a consideration
of what one
might harvest from the land
and how such a harvest
could preserve
the system.
And in the process
we began to imagine
a self-nourishing
self-preserving
system.

Text 3

A Pennine Village
Which Respects the life
within the earth
upon which it stands

It is known how to build
energy efficient walls in a house

It is known how to build
energy efficient windows
and doors and roofs
and heating systems
and waste-disposal systems.
And by extension
it is known
how to build energy efficient houses
and skyscrapers

It is known
how to draw energy from the sun
but not so efficiently
and energy from the wind
and the ocean waves
but not so efficiently
and heat from the earth.
All of these elements
have been individually acted upon
or are being acted upon
and being improved
and re-improved
or may yet simply be
dreamed artifacts
in people's minds.

However
It is not so well known
or at least
not so thought about in depth
nor acted upon vigorously
how to connect
a house
a street
a village
and a water purification system
to the earth
in such a way
that the flow of waters
below the earth's surface
are uninterrupted.
And it is not known
the distribution of trees
that would be required
to enhance the percolation
of waters
that run from hard surfaces
and enable
the ability of earth
to purify water
in a way that is uninterrupted.
Above all
it is not known
how to create forms
on the earth
that respect the life-web
within the earth itself
and leave it minimally interrupted.

So we have begun
a consideration
but by no means
finished that consideration
about how a Pennine village
might interface
with the Earth
Thus all foundations
of structures
big and small

and all roads and pathways
and all service enterprises
such as
electric
and water purification systems
and waste storage systems
sit on the earth
connect with the earth
and penetrate the earth
in a way
that the waters
that flow through the earth
and eco-systems
that have evolved there
and matured there
may continue to be
felicitous to all.

Text 4

On Carbon

Understanding this Pennine place
to be
71 square km or 7,100 hectare
the power
of the passive sequestration of carbon
here
became obvious.
When the choice was made
to conceive an open-canopy forest
that was 40% forested, 2840 hectare
and 60% meadowland, 4260 hectare.
Since meadows sequester
1 tonne of carbon per year
and forests sequester 2 tonnes per year
This new landscape
would pull
about 10,000 tonnes of carbon
from the air every year.
With about 4,000 people
living here now
and imagining a village
of another 4,000 people coming
and moving upward
understanding

that the domestic carbon footprint
of each person is 3 tonnes per year
then
an open-canopy forest grassland
of the kind we are imagining
could passively sequester
about 45%
of each of the 8,000 person's
carbon footprint.
So some of us
began thinking
about how those living here
might remove and sequester
55% of the carbon they use
so that it could be used no more

Text 5

On The Meadows

Given the terrain
the way in which the sun falls
the watersheds distribute themselves
the forest shapes itself
a great diversity of grasslands
wants to happen
with neutral and wet grasslands
with species-rich pastures
harvested by many birds
the gray partridge
skylark, waders, red shanks
and others
there were hay-meadows
again species-rich attractive
to a rich array of invertebrates
including butterflies
such as
the meadow brown
and the common blue
and there were the heathlands
both wet and dry
with heather
and cross-leaved heath
and research was done
about who might live on the meadows.
And the Welsh Black cattle
were selected
for hardiness, adaptability, longevity
and fertility
And the Highland Scots breed
although ornery
survive well
and like the Welsh Black
reproduce
and live off the land
and eat what other cattle pass by.
And we chose the European Bison
the Wisant

which, as the others,
also lives well off the land
liking open areas within forests
the red deer would come
and the mountain hare would come
as would those who hunt them
and assuming
that the total area
of 70 square km
could handle about 1200 head
in 3 different herds
the question of management emerged
with simple ideas
"the harvest will preserve the system"
"the different herd cultures
will be respected"
made clear a management system
needs to be invented
more from hunter/gatherer behaviours
than mono-cultural behaviours
that is to say
we imagine this system to become
a place
where species are dispersed
and harvested throughout
wherein transaction between the parts
is precisely the opposite
of the mono-cultural productivity
that dominates
almost all behaviour
where food production is concerned
and where land management
as a whole
is concerned
and wondered
if such a bold experiment
might be an almost natural outcome
in response to
the rising of waters

Text 6

On The Forests

so others of us
began to think about
what this open-canopy forest
could in fact become
it is a place where
fragments of old secession
upland Oak, Ashwood
and wet woodland
mainly Alder
Cottonwood and Willow
and ancient plantations
mainly
scots pine, norwegian spruce
and the odd broadleaf plantation

of beech
and sycamore
and our thinking centred
around harvesting
with apples, pears
plum and cherry trees
planted at the boundaries
and gooseberries and redberries
especially in the gaps
between oaklands
again with the idea
that time
was a form-determinant
with yearly harvests
of fruits
hundred-year harvests
of softwoods
and several hundred-year harvests
of hardwoods
always harvesting
with the idea that
the act of harvesting
itself
became a contributor
to bio-diversity of the whole

Text 7

On the Pennine Ring

Finally
thinking about big numbers
finding that the Pennine Ring
had the lowest population
and the greatest open space
on the island
we began to think about it
as a whole place
with a length of 215 km
with the area
of the High Pennines
over 300 metres
equaling 4,820 km
and the area
of a 5 km downward perimeter
equaling 5,660 square km
so we did the obvious
and imagined repeating our model
around this ring
80 times
with theme and variations
adding 4,000 people
on this 3,660 square km
each 70 square km shape
and so we discovered
that 320,000 newpeople
might live
and to some extent work

in a harmonious
park-like
savannah-like
bio-diverse
food-producing
open-canopy forest
which by its very nature
dramatically reduced
the carbon footprint of all
and everybody living there
then thinking
about still bigger numbers
as the oceans rise 5 metres
about 2.2 million people
will be displaced
and 10,000 square km of land
covered
and in this circumstance
this Pennine Ring
becomes an invitation to
15% of these people displaced
to move into
a new world
a world that is marvelous

On the Lea Valley and the Thames Gateway

For instance
looking at the Lea Valley watershed
in discourse
with people at Gunpowder Park
it was not difficult
to go in the minds eye
downriver on the Thames a bit
and see the Gateway planning
for a multitude of housing
understanding that what might be built
from those plans
would be underwater as the oceans rise
so we began imagining
the upward movement of planning

For instance
Imagine a new form of dispersal of people
money and resources where
development becomes re-associated
both with settlement
and the generation of biodiverse habitat
and where the one does not subsume the other
as is now so often the case

Imagine that this new settlement form
actually a high rise serpentine
ecologically provident
is spread across
the open areas in the Lea Valley
to the east and north of the Lea River
far above the 5-metre mark
to which in some near future
The waters will rise

We propose a bold experiment
answering the question
can intense population density
and complex biodiversity
coexist within a unified field

Imagine that ecologically provident
culturally appropriate
high-rise dwellings
some of which are already
being designed for people
in large numbers
behaving as a high rise village
each having its own garden

But most important
embedded in this high rise village
is the matter of civility

which is in the main absent
from large box structures

imagine the design of
a vertical main street
which has all the properties
of a small town main street
perhaps a 10,000 person community
wherein the promenade behaves
as a homeostatic mechanism
and then the community
can gauge its own well being
on a daily basis
through the process of seeing and tuning
and where all services
and trade and work
and parklands
and agricultural systems
even aqua-cultural systems
become participants
in the urban metabolism
in a poetry of the whole

Imagine the combined 1,000 sqkm
of farm and meadow lands
within the Lea Valley drain basin
reforested
the every high-rise form
becomes a figure
in a biodiverse forest field
enacting a new paradigm
where contemporary resettlement
displacing much of
the gateway development planning
restates much of the benefit
inherent in
historic village or town forms
and in this new context
the work of the forest
is to sequester carbon
in large amounts
the work of the forest
is to regenerate the earth
as a carbon sink
the work of the forest
is to recreate subsoil ecosystems
and the work of the forest
is to reestablish the earth
as a sponge
thereby enhancing
both the well being of the earth itself
and giving advantage to the water system
of London as a whole