

This is a fragment of
Marden's discussion of
soil types & agricultural
methods. I'd be very
grateful for a copy of this
soon, as I have two
students working in
the field for M. H. S.

This Soil apparently will be much
more durable than the British Land,
in consequence of its natural strength
& Depth. It is well calculated to answer
every purpose a ^{farmer} ~~husbandman~~ may want.
There is a third Soil very different from
the above, found near such Rivers as
overflow their banks at the times of
heavy rains, such as the ^{Settlement} banks of the
Hawkesbury. This Soil is a Mixture
of fresh water land, and what the
flood wash down from the high
adjacent Mountains. The Depth of
this Mud or Compost, ^{on the banks of the river} cannot be
ascertained. it may be ten feet or more.
The last Flood which happened this
Season left upon many Farms
upon several parts of the cultivated
Land Mud 2 or 3 foot deep

so that the Soil becomes like a
bed of Manure. This Land produces
the heaviest Crops of wheat and
maize that perhaps were ever
seen in England if the Season
happens to be any way favourable.
under proper Cultivation it will
produce from 35. to 40 bushels Winⁿ
measure of wheat. & from 60. to 70
Ditto of Maize per Acre.
Notwithstanding the fertility of the
Soil at the Settlement on the banks
of the Hawkesbury I am persuaded
that the Farmer runs a much greater
risk in cropping his Ground there,
than what he does in any other
part of the Settlement. If the
Season proves wet in consequence
of the richness of the Soil the

Soil the Crops of wheat becomes
so rank & strong, that ^{they are} it is liable
either to rot on the ground, or to
be very light in the Ear. If the
Season proves dry by reason of the
great quantity of Land covered with
the Compost left by the Woods,
which absorbs the Heat of the Sun,
the Crops then must also fail; as they
are in this case burnt up at their
very roots. The Hammer also runs
some Risque from the Woods
as they do not return at any stated
Period, and therefore might overflow
his Grounds in, or a little before
Harvest which w^d totally destroy his
^{notwithstanding} Crops. ~~The Hammer~~ has ^{some} great
Advantages in this Land, it is thin
of Timber, so that it can be easily

plowed, it works remarkably well
and requires little Seed, one Bushel
and a Peck being sufficient to sow
an Acre.

There is a fourth Kind of Soil at present
in Cultivation. This is composed of
Sand and Clay, where the Sand
predominates the Land is easy to work
produces great Crops of ~~Inde~~ Maize
but does not answer well for wheat
the Soil being too dry & hot. It is
good for Potatoes, ~~and~~ especially with
a little Manure. ~~For~~ The Land where
the Clay predominates, is hard
and difficult to work, and in a
Season very heavy and sticks to the
Plow: neither does it produce any
Kind of Grain remarkably well

It is found to answer well for a
Kitchen Garden where a little
manure can be given it and
wrought with the Shad-
~~The above kinds are mostly in~~
~~Cultivation~~

The above kind of Land are found
to be the most valuable for Cultiva^{tion}
tho' there are many hundred Acres
cleared where the soil is thin &
stone which for want of Manure
and good Cultivation bear but light
Crops & will scarcely pay the
Expense of working them as the
Price of Labor is very high in
every part of the Settlement.

These few scattered Hints respecting
the soil, (which are neither so

copious nor ^{so} accurate as I could wish
them) I submit to your Inspection.
make what use of them you judge
proper. Had I turned my Attention
to them sooner, or my Time had
not been so much occupied with
other things, they might have
been better arranged than what they
are.

Manner of Cultivation —
Unfortunately for this Colony there
never was any professional Husband
man sent out by Government to
this Day to superintend the Cultivation
of the Ground; and to point out the
best mode for carrying on the
Concerns of Agriculture. The whole
of this important Science ^{the success of} upon which
the Riches and Poverty of a Nation
depend has been managed hitherto

either by Persons who had no knowledge
of Farming or their Arrivals in the
Colony, or if any officer happened to
~~have~~ know any thing of Agriculture
he had other concerns to attend to in
the line of his Profession, which
prevented him from giving up his
Time & Attention to these Studies.
Experience has already clearly evinced
what little Advantage the Colony
is likely to derive from permitting
such Persons as have been Prisoners
to become Settlers. These men in general
have not been brought up in the
Habits of industry, but of extreme
Idleness. They have the greatest Aversion
to Labour, to Subordination and good
Government. Their idle, licentious &

ungovernable Habits are fixed in many
of them for life. They set no value
whatever upon Property. Present
Gratification is their only object. Their
Farm, their Crops their Stock and
all they possess they will sell for the
mean sake of indulging themselves
in a few bottles of liquor. Can it
be expected then that men of such
Principles & Character, can ever become
good and useful members of the
Community, and promote the Prosperity
of the Colony? Surely not.
There is another cogent objection against
many of the Prisoners becoming
Settlers when the Term of their
Servitude expires. which is their total
ignorance of Agriculture. When they
have obtained a Grant of Land they

are at a loss how to proceed to its
Cultivation. many of them have
been known to sow their land
with wheat without so much as
previously breaking up the ground.
It being in its original state, not so
much as an Hoe or Spade put into it.
After the wheat is sown they have just
shipped the ground over two or three
inches deep and left it to take its
Chance. This method they have
adopted partly thro Ignorance &
partly thro Idleness. but surely the
Husbandman cannot reasonably expect
a Crop if the ground is not properly
tilled. ~~If there happens to be in a District~~
an industrious man who is anxious to
~~get forward & has been~~ attain a Competence

If there happens in a District to be
an industrious industrious man ~~in a~~
District who is anxious to obtain a
Competence ^{for himself and family} and to live comfortably
he is sure to be plundered of his Grain
& Stock constantly by his idle licentious
Neighbours. This is a dreadful Evil
and puts the severest Check upon the
Industry even of the well Disposed.
A man and his Family may labour
but they are never certain of enjoying
the Fruits of it. If they possess anything
they run a Risque not only of losing their
Property but their lives if they dare to
defend it. Such is the miserable State
of the farming Interest in this Colony
the idle worthless Settler will not
cultivate his land he cannot endure to
labour, or if he does he soon squanders it away

and the industrious dare not lest he
 if his land will bring forth a plentiful crop
 be robbed or murdered. This will ever
 be the case so long as the general
 mass of the People are composed
 of the ~~Idle~~^{Dregs} of the three Kingdoms.
 At present there can be no Comparison
 between the Number of the ~~Idle~~ ignorant
 idle & profligate Lettlers, and the experienced
 industrious & sober, who have been allowed
 to become Lettlers, the number of
 the former so far exceeds the latter.
 From the above sad Circumstances it is obvious
 that ~~reasonably be expected that any~~^{no} accurate
 and just Idea founded upon Experiment
 can be given of what the Land in this
 Colony is really capable of producing.
 If a Lettler or Officer has got a tolerable
 good Farm and pays a little Attention
 to its Concerns it will amply repay