Terms <sup>†</sup>	Description	Refs.
Colony presence	Wading bird nesting colony presence may increase alligator body condition due to the large quantities of supplemental food they provide.	[1]
Minimum water depth <sup>†</sup>	We predict alligator body condition to have a unimodal response to minimum water depth: Moderately low water depths (<40 cm) increase food availability via spatial confinement of prey. Yet low water depths (<15 cm) limit alligators' ability to move and forage, and in particularly dry years/areas ( $\leq 0$ cm), alligator aquatic refuge becomes limited; both of these especially dry conditions presumably increase stress and decrease body condition.	[2–5]
Water depth range	Greater range in water depth can increase wetland productivity, which could increase prey abundance and improve alligator body condition.	[6–9]
Tree island area	Nutrient-dense tree islands increase local productivity, so alligators in habitat with greater amounts of tree island area may have greater food opportunities.	[10–13]
Minimum water depth <sup><math>\dagger</math></sup> × Water depth range	We include an interactive term between minimum water depth and range in water depth because in deep water where food availability is low, we predict high productivity driven by range in water depth to have a pronounced effect.	[2–9]
Minimum water depth <sup><math>\dagger</math></sup> × Tree island area	We predict an interaction between minimum water depth and tree island area, as potential increases in productivity associated with tree island area should have a reduced effect during drier conditions when alligators have lower mobility and cannot take advantage of increases in resources.	[2-5, 10-13]
Minimum water depth <sup><math>\dagger</math></sup> × Alligator holes	In low water conditions, aquatic prey congregates in alligator holes, providing ample food for alligators and presumably improving body condition. We predict an interaction with minimum water depth, as alligator holes would probably have a more pronounced effect in drier conditions.	[2–5, 14, 15]
Colony presence $\times$ Minimum water depth <sup>†</sup>	We predict colony presence to interact with minimum water depth, as food from colonies probably has a pronounced effect when food availability is otherwise low (in deeper-water areas). Moreover, dry conditions (<15 cm) may reduce colonies' effects, as they would limit alligator movement.	[1–5]
Colony presence + Water depth range	Both colony presence and productivity via range in water depth may have additive effects on alligator body condition due to increased food opportunities.	[1,6–9]
Colony presence + Water depth range + Alligator holes	Here we predict that alligators would have highest body condition in habitat containing nesting colonies, large numbers of alligator holes, and great range in water depth.	[1,6–9,14,15]
Colony presence + Tree island area	Greater prey abundance due to nutrients from tree islands might combine with food from colonies to provide ample food for alligators, thereby improving their body condition.	[1,10–13]

† Quadratic term included

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