Table S1. Correlation coefficients for condition, age, and immune variables for adultmale and female Yellow Mud Turtles in western Nebraska. zAge is z-transformed age;Asin(BC) is Arcsine-transformed Bactericidal Competence; Log(NAbs) is log10Agglutination titre; Log(Lys) is log10 Lysis titre. See text for details.

		Asin(BC)	Log(NAbs)	Log(Lys)
zAge				
-	r	-0.21	-0.17	-0.13
	$P_{\rm r}=0$	0.003	0.017	0.06
	N	197	198	198
Asin(BC)				
	r		0.22	0.25
	$P_{\rm r}=0$		0.001	0.0003
	N		198	198
Log(NAbs)				
,	r			0.28
	$P_{\rm r}=0$			0.0001
	N			199

	BM	Clutch Size	Egg Mass	Clutch Mass	CM/BM
Age					
r	0.74	0.15	0.65	0.42	-0.22
$P_{\rm r}=0$	<0.0001	0.17	<0.0001	<0.0001	0.05
N	84	85	85	85	84
Body mass (BM)		0.42	0.71	0.68	-0.17
• • • •		<0.0001	<0.0001	<0.0001	0.12
		84	84	84	84
Clutch Size					
r			0.23	0.89	0.73
$P_{\rm r}=0$			0.04	<0.0001	<0.0001
N			85	85	84
Egg Mass					
r				0.65	0.09
$P_{\rm r}=0$				<0.0001	0.39
N				85	84
Clutch Mass					
r					0.61
$P_{\rm r}=0$					<0.0001
N					84

Table S2. Correlation coefficients for age, size, and reproductive variables for female
Kinosternon flavescens in western Nebraska that reproduced in 2017.

Fig. S1. Relationship between clutch size and bactericidal competence (BC) for female Kinosternon flavescens in western Nebraska that reproduced in 2017. The Y-axis is residuals from the full model in Table 3 excluding clutch size. See Table 3 for statistics.



Fig S2. Age distribution of adult male and female yellow mud turtles in this study. Median female and male age significantly differed, and standardized age was used in analyses that included both sexes. See main text for details.

